

Sierra Water Trust Project

Deer Creek Watershed Water Rights Assessment

Sierra Streams Institute/Friends of Deer Creek and American Rivers

Introduction

Sierra Streams Institute/Friends of Deer Creek (SSI/FODC) and American Rivers are collaboratively working on the Sierra Water Trust Project. The purpose of this document is to conduct a generalized analysis of water rights in Deer Creek, identifying who holds water rights, how they are leased, and possibilities for transfers/dedications to instream flow. This satisfies Task 5 of the Sierra Water Trust Project between SSI/FODC and American Rivers.

Water rights in California

There are two principal types of surface water rights in California, riparian and appropriative rights.

Riparian rights - A riparian right enables an owner of land bordering a natural lake or stream to take and use water on his riparian land. Riparian land must be in the same watershed as the water source and must never have been severed from the sources of supply by an intervening parcel without reservation of the riparian right to the severed parcel. Generally, a riparian water user must share the water supply with other riparian users. Riparian rights may be used to divert the natural flow of a stream but may not be used to store water for later use or to divert water which either originates in a different watershed, was previously stored by others, consists of return flows from use of groundwater, or is otherwise "foreign" water to the natural stream system. Riparian water users are required to file Statements of Water Diversion and Use in order to divert and use water.

Appropriative rights - An appropriative right is required for use of water on non-riparian land and for storage of water. Appropriative rights may be exercised only when there is a surplus not needed by riparian water users. Since the formation of the California Water Commission on December 19, 1914, new appropriators have been required to obtain a permit and license from the State of California. Pre-1914 appropriative users must file a Statement of Water Diversion and Use in order to appropriate water. Appropriative rights can be granted for waters that are foreign to the natural stream system.

Who holds water rights?

Licenses for Diversion and Use of Water

The following section provides a summary of the most pertinent information on every License for Diversion and Use of Water that is currently active in the Deer Creek watershed. Copies of each license are included in the appendix.

- Licensee: United States - Tahoe National Forest. Nevada City, California. Priority of this right dates from July 15, 1942.

- Application: 10503 Permit: 6100 License: 2900

- Right to the use of the water of Indian Spring in Nevada County, tributary to South Fork of Deer Creek thence Deer Creek thence Yuba River. The water right is for the purpose of Domestic and Fire Protection Uses.

- Water rights entitlement shall not exceed 300 gallons/day for domestic purposes or 8,000 gallons/day total for domestic and fire protection purposes from about May 1, to about October 15

of each season, provided, however, that nothing herein contained shall be construed as confirming in licensee any right which shall be good as against a subsequent appropriator to an amount for fire protection purposes in excess of what is reasonably necessary to maintain an adequate reserve in storage for fire protection except when there exists an actual need thereof for fire fighting use.

- Diversion and Property Locations:

Diversion – North 1,936 feet and West 264 feet from the SE corner of Section 27, T17N, R10E, MDB&M, being within the NE1/4 of SE1/4 of said Section 27.

Property – Within NE1/4 of SE1/4 of Section 27, T17N, R10E, MDB&M.

- Licensee: United States – Tahoe National Forest. Nevada City, California. Priority of this right dates from March 22, 1941.

- Application: 10159 Permit: 5794 License: 4175

- Right to the use of the water of Skillman Flat Spring in Nevada County, tributary to North Fork Deer Creek thence Deer Creek thence Yuba River. The water right is for the purpose of Domestic Use.

- Water rights entitlement shall not exceed 660 gallons/day, to be diverted from about April 1 to about December 31 of each year.

- Diversion and Property Locations:

Diversion – south 430 feet and east 545 feet from NW corner of Section 30, T17N, R11E, MDB&M, being within NW1/4 of NW1/4 of said Section 30.

Property – within SW1/4 of SW1/4 of Section 19, T17N, R11E, MDB&M.

- Licensee: United States – Tahoe National Forest. Nevada City, California. Priority of this right dates from March 22, 1941.

- Application: 10156 Permit: 5791 License: 4888

- Right to the use of the water of White Cloud Springs in Nevada County, tributary to North Fork Deer Creek thence Deer Creek thence Yuba River. The water right is for the purpose of Domestic and Fire Protection Uses.

- Water rights entitlement shall not exceed 2,000 gallons/day for domestic purposes or 14,000 gallons/day for domestic and fire protection purposes from about May 1 to about November 30 of each year; provided, however, that nothing herein contained shall be construed as confirming in licensee any right which shall be good as against a subsequent appropriator, to an amount for fire protection except when there exists an actual need thereof for fire fighting use.

- Diversion and Property Locations:

Diversion – South 2,484 feet and East 324 feet from NW corner of Section 23, T17N, R10E, MDB&M, being within SW1/4 of NW1/4 of said Section 23.

Property – NW1/4 of SE1/4 of Section 22, T17N, R10E, MDB&M.

- Licensee: Oscar Bailey and Louise P. Bailey. P.O. Box 961, Grass Valley, California 95945. Priority of this right dates from June 20, 1956. Assigned to Trevor D. Robbins and Sue A. Robbins.

- Application: 17142 Permit: 10833 License: 6907

- Right to the use of the water of (1) Hiscox Ravine and (2) unnamed stream in Nevada County, tributary to (1) Gold Run Creek thence Deer Creek thence Yuba River and (2) Hiscox Ravine, tributary to Gold Run Creek thence Deer Creek thence Yuba River. The water right is for the purpose of Recreational Use.

- Water rights entitlement shall not exceed 2.6 acre-feet per annum, to be collected from either or both sources from about December 1 of each year to about May 1 of the succeeding year. The maximum rate of diversion from Hiscox Ravine to offstream storage is 0.6 ft³/sec.

- Diversion and Property Location:

Diversion – (1) Point of diversion on Hiscox Ravine to offstream storage – north 335 feet and east 475 feet from S1/4 corner of Section 18, T16N, R9E, MDB&M, being within SW1/4 of SE1/4 of said Section 18. (2) Point of diversion on unnamed stream and point of redirection of water from Hiscox Ravine – north 1,000 feet and east 250 feet from S1/4 of Section 18, T16N, R9E, MDB&M, being within SW1/4 of SE1/4 of said Section 18.

Property – At reservoir within SW1/4 of SE1/4 of Section 18, T16N, R9E, MDB&M.

- Licensee: Nevada Irrigation District. 1036 W Main Street, Grass Valley, California 95945.

Priority of this right dates from January 8, 1920.

- Application: 1615 Permit: 5801 License: 8808

- Right to the use of the water of South Fork Deer Creek and Deer Creek in Nevada County, tributary to the Yuba River. Right to the use of the water of: (1) Cascade Ditch, (2) Snow Mountain Ditch, (3) Deer Creek Diversion Dam, (4) Rough and Ready Ditch, (5) New Town Ditch, (6) Ripple Box Ditch (Tunnel Ditch), and (7) China Ditch. The water right is for the purpose of Irrigation and Domestic Uses.

- Water rights entitlement shall not exceed 100 ft³/sec to be diverted from about April 1 to about October 1 of each year. The equivalent of such continuous flow allowance for any thirty-day period may be diverted in a shorter time if there be no interference with other vested rights.

- Irrigation of approximately 8,000 acres net within a gross area of 167,789 acres and domestic use, all within the boundaries of the Nevada County Unit of the Nevada Irrigation District, as shown on map filed with State Water Resources Control Board.

- Licensee: Kim E. Hornsby and Pinka Loveta Hornsby. Box 258, Grass Valley, California 95945. Priority of this right dates from May 10, 1962.

- Application: 20770 Permit: 14744 License: 9239

- Right to the use of the water of 2 unnamed springs in Nevada County, tributary to Deer Creek thence Yuba River. The water right is for the purpose of Domestic Use.

- Water rights entitlement shall not exceed 1,800 gallons/day, to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this license shall not exceed 1 acre-feet per year.

- Diversion and Property Locations:

Spring #1 – South 1,300 feet and west 750 feet from NE corner of Section 22, T16N, R7E, MDB&M, being within NE1/4 of NE1/4 of said Section 22.

Spring #2 – South 750 feet and west 200 feet from NE corner of Section 22, T16N, R7E, MDB&M, being within NE1/4 of NE1/4 of said Section 22.

Property – Within NE1/4 of NE1/4 of Section 22, T16N, R7E, MDB&M.

- Licensee: Ivan Thorpe Branson, assigned to Indian Springs Vineyard 1/11/1996. Priority of this right dates from June 15, 1967.

- Application: 22820 Permit: 15767 License: 9684

- Right to the use of the water of an unnamed stream in Nevada County, tributary to Clear Creek thence Squirrel Creek thence Deer Creek. The water right is for the purpose of Irrigation, Stock Watering, Recreational, and Fire Protection Uses.

- Water rights entitlement shall not exceed 13 acre-feet per annum, to be collected from October 15 of each year to March 1 of the succeeding year. The maximum withdrawal in any one year shall not exceed 10 acre-feet.

- Diversion and Property Location:

Diversion – South 150 feet and West 2,550 feet from NE corner of Section 11, T15N, R7E, MDB&M, being within NW1/4 of NE1/4 of said Section 11.

Property – Pond Maidu within NW1/4 of NE1/4 of Section 11, T15N, R7E, MDB&M, and Irrigation of 5 acres within SE1/4 of SW1/4 of Section 2, T15N, R7E, MDB&M.

- Licensee: Church of Antioch. P.O. Box 1102, Nevada City, California 95959. Assigned to Roy and Jacqueline Ramey on 3/24/1976. Priority of this right dates from June 13, 1961.

- Application: 20263 Permit: 13977 License: 10086

- Right to the use of the water of West Branch Gold Run Creek (an unnamed stream) in Nevada County, tributary to Gold Run Creek thence Deer Creek thence Yuba River. The water right is for the purpose of Fish Culture Use.

- Water rights entitlement shall not exceed 0.05 cubic feet per second (cfs), to be diverted from October 1 of each year to June 1 of the following year.

- Diversion and Property Locations:

Diversion – South 1,180 feet and east 430 feet from NW corner of Section 18, T16N, R9E, MDB&M, being within NW1/4 of NW1/4 of said Section 18.

Property – At a trailer park within NW1/4 of NW1/4 of Section 18, T16N, R9E, MDB&M.

- Licensee: Jerrald Donniss and Reathal Donniss. Washington Star Route, Nevada City, California 95959. Assigned to David and Sandra Hershberger on 8/30/1989. Priority of this right dates from May 20, 1970.

- Application: 23514 Permit: 16108 License: 10245

- Right to the use of the water of an unnamed spring in Nevada County, tributary to an unnamed stream thence Deer Creek thence Yuba River. The water right is for the purpose of Domestic and Fire Protection Uses.

- Water rights entitlement shall not exceed 250 gallons/day, to be diverted from January 1 to December 31 of each year. So long as there is no interference with other rights, junior as well as senior, licensee may increase the rate of diversion to a maximum of 12 gallons/minute; provided that the total quantity diverted in any 1-day period does not exceed 1,150 gallons.

- Diversion and Property Locations:

Spring – North 111 feet and West 861 feet from SE Corner of Section 35, T11N, R9E, MDB&M, being within SE1/4 of SE1/4 of said Section 35.

Property – Within NW1/4 of NE1/4 of Section 2, T16N, R9E, MDB&M.

- Licensee: Leyland E. Stevens. 183 Edgewood Avenue, San Francisco, California 94117. Assigned to Wayne Stahmer 12/28/1995. Priority of this right dates from March 19, 1970.

- Application: 23470 Permit: 16259 License: 10568

- Right to the use of the water of an unnamed stream in Nevada County, tributary to Clear Creek thence Squirrel Creek thence Deer Creek thence Yuba River. The water right is for the purpose of Stock Watering and Recreational Uses.

- Water rights entitlement shall not exceed 5.4 acre-feet per annum, to be collected from December 1 of each year to April 1 of the succeeding year. The license does not authorize collection of water to storage outside of the specified season to offset evaporation or seepage or

for any other purpose. After the initial filling of the reservoir, licensees right under this license extends only to water necessary to keep the storage reservoir full by replacing water beneficially used and water lost by evaporation and seepage, and to refill if emptied for necessary maintenance or repair.

- Diversion and Property Location:

Diversion – North 1,200 feet and East 2,300 feet from SW corner of Section 6, T15N, RBE, MDB&M, being within SW1/4 of SE1/4 of said Section 6.

Property – Stock Watering and Recreational uses within SW1/4 of SE1/4 of Section 6, T15N, RBE, MDB&M.

- Licensee: Bruce L. Rayner and Marilyn D. Rayner. Box 199-W, Willow Valley Road, Nevada City, California 95959. Priority of this right dates from January 30, 1973.

- Application: 24293 Permit: 16636 License: 10700

- Right to the use of the water of Mosquito Creek in Nevada County, tributary to Deer Creek thence Yuba River. The water right is for the purpose of Recreational and Wildlife Enhancement Uses.

- Water rights entitlement shall not exceed 1.8 acre-feet per annum, to be collected from October 15 of each year to April 15 of the succeeding year. The license does not authorize collection of water to storage outside of the specified season to offset evaporation or seepage or for any other purpose. After the initial filling of the reservoir, licensees right under this license extends only to water necessary to keep the storage reservoir full by replacing water lost by evaporation and seepage, and to refill if emptied for necessary maintenance or repair.

- Diversion and Property Location:

Diversion – North 70 feet and West 580 feet from SE corner of Section 5, T16N, R9E, MDB&M, being within SE1/4 of SE1/4 of said Section 5.

Property – At reservoir within SE1/4 of SE1/4 of Section 5, T16N, R9E, MDB&M.

- Licensee: Lake Wildwood Association. P.O. Box 397, Penn Valley, California 95940. Priority of this right dates from May 17, 1968.

- Application: 23047 Permit: 15779 License: 10779

- Right to the use of the water of Deer Creek in Nevada County, tributary to the Yuba River. The water right is for the purpose of Recreational Use.

- Water rights entitlement shall not exceed 3,840 acre-feet per annum, to be collected from November 1 of each year to April 15 of the succeeding year. Water entering the reservoir or collected in the reservoir during and after the current storage season shall be released into the downstream channel to the extent necessary to satisfy downstream prior rights and/or to the extent that appropriation of water is not authorized under this license. The license does not authorize collection of water to storage outside of the specified season to offset evaporation or seepage or for any other purpose. Licensee shall release into Deer Creek below the damsite, 5.0 ft³/sec or the natural flow, whichever is less, year-round.

- Licensee: Ward B. Shinn and Shirley A. Shinn. 10033 Brunswick Road, Grass Valley, California 95945. Priority of this right dates from June 24, 1970.

- Application: 23535 Permit: 16409 License: 11027

- Right to the use of the water of (1) an unnamed stream and (2) Willow Valley Creek in Nevada County, tributary to (1) Willow Valley Creek and (2) Deer Creek thence Yuba River. The water right is for the purpose of Irrigation, Domestic, Stock Watering, Wildlife Management, Fish Culture, and Recreational Uses.

- Water rights entitlement shall not exceed 15.7 acre-feet per annum, to be collected from November 1 of each year to May 1 of the succeeding year as follows: (1) Upper Reservoir – 3.7 acre-feet, (2) Lower Reservoir – 12 acre-feet. The maximum withdrawal in any one year from both reservoirs shall not exceed 10 acre-feet. The license does not authorize collection of water to storage outside of the specified season to offset evaporation or seepage or for any other purpose.

- Diversion and Property Location:

Diversion - (1) North 2,550 feet and West 650 feet from SE corner of Section 4, T16N, R9E, MDB&M, being within NE1/4 of SE1/4 of said Section 4 and

(2) North 2,000 feet and West 850 feet from SE corner of Section 4, T16N, R9E, MDB&M, being within NE1/4 of SE1/4 of said Section 4.

Property – Domestic, Stock Watering, Recreational, Fish Culture, and Wildlife Enhancement Uses within SE1/4 of NE1/4 and NE1/4 of SE1/4 of Section 4, T16N, R9E, MDB&M, and Irrigation of 20 acres as follows:

- 4 acres within SE1/4 of NE1/4 of Section 4, T16N, R9E, MDB&M

- 16 acres within NE1/4 of SE1/4 of Section 4, T16N, R9E, MDB&M

- Licensee: John C. Low, Jr. and Marjorie J. Low. 13303 Hopeful Hill Road, Nevada City, California 95959. Priority of this right dates from August 24, 1979.

- Application: 26073 Permit: 18076 License: 12085

- Right to the use of the water of an unnamed stream in Nevada County, tributary to Deer Creek thence Yuba River thence Feather River thence Sacramento River. The water right is for the purpose of Stock Watering and Recreational Uses.

- Water rights entitlement shall not exceed 4.2 acre-feet per annum, to be collected from November 1 of each year to April 15 of the succeeding year. The license does not authorize collection of water to storage outside of the specified season to offset evaporation or seepage or for any other purpose. After the initial filling of the reservoir, licensees right under this license extends only to water necessary to keep the storage reservoir full by replacing water lost by evaporation and seepage, and to refill if emptied for necessary maintenance or repair.

- Diversion and Property Location:

Diversion - South 2,600 feet and west 2,000 feet from NE corner of Section 17, T16"N, R8E, MDB&M, being within SW1/4 of NE1/4 of said Section 17.

Property - At reservoir within SW1/4 of NE1/4 of Section 17, T16N, R8E, MDB&M.

- Licensee: Jerrald Donnis and Reathal Donnis. 10373 Pine Flat Way, Nevada City, California 95959. Priority of this right dates from August 14, 1979.

- Application: 26065 Permit: 17908 License: 12157

- Right to the use of the water of an unnamed spring in Nevada County, tributary to an unnamed stream thence Deer Creek thence Yuba River thence Feather River thence Sacramento River. The water right is for the purpose of Domestic Use.

- Water rights entitlement shall not exceed 500 gallons/day to be diverted from April 1 to October 30 of each year. The maximum amount diverted under this license and License 10245 (Application 23514) shall not exceed 0.6 acre-feet per year. The equivalent of such continuous flow allowance for any 7-day period may be diverted in a shorter time provided there be no interference with other vested rights and instream beneficial uses; and provided further that all terms or conditions protecting instream beneficial uses be observed.

- Diversion and Property Location:

Diversion - North 777 feet and west 861 feet from SE corner of Section 35, T17N, R9E, MDB&M, being within SE1/4 of SE1/4 of said Section 35.

Property - At residence and grounds within NW1/4 of NE1/4 of Section 2, T16N, R9E, MDB&M.

- **Licensee: City of Nevada City.** 317 Broad Street, Nevada City, California 95959. Priority of this right dates from October 17, 1979.

- Application: 26117 Permit: 18434 License: 12293

- Right to the use of the water of (1) an Unnamed Stream and (2) Little Deer Creek in Nevada County, tributary to (1) Little Deer Creek thence (2) Deer Creek thence Yuba River thence Feather River thence Sacramento River. The water right is for the purpose of Municipal Use.

- Water rights entitlement shall not exceed 53.7 acre-feet per annum, to be collected from December 1 of each year to April 1 of the succeeding year. The maximum withdrawal in any one year shall not exceed 47 acre-feet. The maximum rate of diversion to offstream storage shall not exceed 4.5 ft³/sec. This license does not authorize collection of water to storage outside of the specified season to offset evaporation and seepage losses or for any other purpose.

- Diversion Locations:

(1) South 18°26'09" East 1,393.772 feet from W1/4 corner of Section 17, T16N, R9E, MDB&M, being within the NW1/4 of SW1/4 of said Section 17.

(2) North 17°22' East 324 feet from NW corner of SE1/4 of SE1/4 of Section 17, T16N, R9E, MDB&M, being within the NE1/4 of SE1/4 of said Section 17.

- Property Locations: Within the service area of the City of Nevada City as shown on map filed with State Water Resources Control Board.

Permits for Diversion and Use of Water

The following section provides a summary of the most pertinent information on every water rights permit that has been issued and is currently active in the Deer Creek watershed. Copies of each permit and supplemental information are included in the appendix.

- **Applicant: Nevada Irrigation District** 1036 W Main Street, Grass Valley, California 95945

Permit: 1481 Application: 1614 Date Issued: July 20, 1923

Permit 1481 is for storage of water from Deer Creek for consumptive use purposes within the boundaries of the Nevada Irrigation District.

Source: Deer Creek in Nevada County, tributary to Yuba River.

Purpose of Use: Irrigation of 11,739 acres within the NID Deer Creek Service Area, Municipal, Industrial, Domestic, Recreation, Incidental Power at Scotts Flat Powerhouse.

The water appropriated shall be limited to the quantity that can be beneficially used and shall not exceed 60,000 acre-feet per annum, to be collected between January 1 and December 31 of each season. The capacity of the storage reservoir, Scotts Flat Reservoir, is 48,547 acre-feet. Scotts Flat Dam is the point of diversion of water.

Location of points of re-diversion: Lower Scotts Flat Diversion Dam, Tarr Canal, Newtown Canal, Tunnel Canal, China/Union Canal, Rattlesnake Diversion Dam

- **Applicant: Nevada Irrigation District** 1036 W Main Street, Grass Valley, California 95945

Permit: 5815 Application: 8180 Date Issued: June 17, 1941

Source: (1) Clear Creek, (2) Texas Creek, (3) Fall Creek, (4) Trap Creek, and (5) Rucker Creek, (1), (3), (4), and (5) tributaries to the South Yuba River and (2) tributary to Canyon Creek.

Purpose of Use: Irrigation and Domestic. The water appropriated shall be limited to the quantity that can be beneficially used and shall not exceed (1) 30 ft³/sec, (2) 70 ft³/sec, (3) 85 ft³/sec, (4) 15 ft³/sec, (5) 25 ft³/sec to be diverted from January 1 to December 31 of each season for immediate use, and (1) 6,000 acre-feet, (2) 14,000 acre-feet, (3) 17,000 acre-feet, (4) 3,000 acre-feet, and (5) 5,000 acre-feet for temporary storage to be collected from November 1 and June 30 of each season. Combined total rate of diversion to storage shall not exceed 350 ft³/sec.

Locations of points of diversion: Clear Creek, Texas Creek, Fall Creek, Trap Creek, and Rucker Creek.

Locations of points of re-diversion: South Fork of Yuba River at Spaulding Dam, South Fork of Yuba River at head of Excelsior ditch, on Bear River at Parker Dam.

Storage Dams under permit: Scotts Flat

- Applicant: Nevada Irrigation District 1036 W Main Street, Grass Valley, California 95945

Permit: 13770 Application: 5193 Date Issued: October 3, 1962

Source: Middle Fork Yuba River in Nevada County.

Purpose of Use: Irrigation, Incidental Domestic, and Recreational. The water appropriated shall be limited to the quantity that can be beneficially used and shall not exceed 50,000 acre-feet per annum by storage to be collected from about October 1 to December 1 of each year and from January 1 to about June 30 of the succeeding year. Diversion to off-stream storage in Bowman Reservoir shall not exceed 500 ft³/sec.

Locations of points of diversion or re-diversion in Deer Creek watershed: Cascade Ditch, Scotts Flat Dam, D.S. Diversion, Rough and Ready Ditch, Newtown Canal, Deer Creek, Tunnel Canal, China/Union Canal, Squirrel Creek, Tarr Canal, Snow Mountain Ditch. Please refer to the appendix and permit for a full list of points of diversion, re-diversion, and storage reservoirs included under this permit. Storage dam in Deer Creek watershed is Scotts Flat Dam at Scotts Flat Reservoir. Under this permit there is a seasonal storage limit of 52,000 acre-feet for Scotts Flat Reservoir.

- Applicant: Nevada Irrigation District 1036 W Main Street, Grass Valley, California 95945

Permit: 13772 Application: 20017 Date Issued: October 3, 1962

Source: South Fork Yuba River in Nevada County, tributary to Yuba River.

Purpose of Use: Irrigation from about April 15 to October 15 of each year, and Domestic. The water appropriated shall be limited to the quantity that can be beneficially used and shall not exceed 200 ft³/sec for diversion to be directly applied to beneficial use from September 1 to June 30 of the succeeding year, and 18,000 acre-feet for diversion to be stored and later applied to beneficial use to be collected from November 1 to June 30 of the succeeding year. The maximum rate of diversion to storage is 200 ft³/sec. Spaulding Dam is listed as the diverting dam, and Rollins and Scotts Flat are listed as storage reservoirs.

Locations of points of re-diversion in Deer Creek watershed: Cascade Ditch, Scotts Flat Dam, D.S. Diversion, Rough and Ready Ditch, Newtown Canal, Deer Creek, Tunnel Canal, China/Union Canal, Squirrel Creek, Tarr Canal, Snow Mountain Ditch. Please refer to the appendix and permit for a full list of points of re-diversion.

- Applicant: Nevada Irrigation District 1036 W Main Street, Grass Valley, California 95945

Permit: 13773 Application: 20072 Date Issued: October 3, 1962

Source: Middle Yuba River in Nevada County, tributary to Yuba River thence Feather River.

Purpose of Use: Power. The water appropriated shall be limited to the quantity than can be beneficially used and shall not exceed 50,000 acre-feet to be collected from October 1 of each year to June 30 of the succeeding year, for diversion to be stored and later applied to beneficial use. Jackson Meadows Dam is listed as the diverting dam, and Jackson Meadows Reservoir and Bowman are listed as storage reservoirs.

Powerhouses in the Deer Creek watershed: Deer Creek Powerhouse.

- **Applicant: Nevada Irrigation District** 1036 W Main Street, Grass Valley, California 95945

Permit: 18608 Application: 27132 Date Issued: October 27, 1982

Source: Deer Creek in Nevada County, tributary to Yuba River thence Feather River.

Purpose of Use: Power. The water appropriated shall be limited to the quantity that can be beneficially used and shall not exceed 85 ft³/sec by direct diversion and 60,000 acre-feet per annum by storage from January 1 to December 31 of each year.

Location of point of diversion: Scotts Flat Dam

Statement of Water Diversion and Use

Riparian and pre-1914 appropriative water users must file Statements of Water Diversion and Use as set forth in California Water Code section 5100. Statements are filed to provide a record of water use, to allow the State to notify users of proposed upstream appropriations, and to assist the State with determining whether additional water is available for future appropriation. The following section summarizes the details of each Statement of Water Diversion and Use on record with the Division of Water Rights within the Deer Creek watershed. Statements are organized from S000034 through S016087.

- Owners of Record: Jane T Oleson and Raymond C Oleson

- Contact: 11931 Willow Valley Road, Nevada City, California 95959

- Statement Number: S000034

- Water is used under: Pre-1914 Right Year of First Use: 1896

- Source Name: Willow Valley Creek in Nevada County, tributary to Deer Creek thence Yuba River.

- Name of Diversion: Open Ditch from Willow Valley

- Diversion Capacity: 289 gallons/min Storage Capacity: 325,851 gallons

- Annual Water Use: 5.4 acre-feet per month, about 65 acre-feet per year.

- Place of Diversion: APN: 36-120-11/36-120-12, SE1/4 of SW1/4 of Section 4, T16N, R9E, MDB&M.

- Place of Use: 11931 Willow Valley Road

- Purpose of Use: Irrigation, Stock Watering, Domestic, Fire Protection

- Owners of Record: Catherine Harley and Susan Totels

- Contact: Harley – 24760 Harrison, Forest Hill, California 95631. Totels – 10719 Old Pond Lane, Grass Valley, California 95949

- Statement Number: S000531

- Water is used under: Pre-1914 Right Year of First Use: 1900

- Source Name: Blue Ravine Creek in Nevada County, tributary to Squirrel Creek thence Deer Creek thence Yuba River.

- Name of Diversion: None Diversion Capacity: Unknown

- Annual Water Use: Unknown

- Place of Diversion and Use: SW1/4 of SE1/4 of Section 24, T16N, R7E, MDB&M.

- Purpose of Use: Irrigation, Stock Watering, Domestic

- Owners of Record: Catherine Harley and Susan Totels

- Contact: Harley – 24760 Harrison, Forest Hill, California 95631. Totels – 10719 Old Pond Lane, Grass Valley, California 95949

- Statement Number: S000532

- Water is used under: Pre-1914 Right Year of First Use: 1900

- Source Name: Blue Ravine Creek in Nevada County, tributary to Squirrel Creek thence Deer Creek thence Yuba River.

- Name of Diversion: None Diversion Capacity: Unknown

- Annual Water Use: Unknown

- Place of Diversion and Use: SW1/4 of SE1/4 of Section 24, T16N, R7E, MDB&M.

- Purpose of Use: Irrigation, Stock Watering, Domestic

- Owners of Record: Catherine Harley and Susan Totels

- Contact: Harley – 24760 Harrison, Forest Hill, California 95631. Totels – 10719 Old Pond Lane, Grass Valley, California 95949

- Statement Number: S000533

- Water is used under: Pre-1914 Right Year of First Use: 1900

- Source Name: Blue Ravine Creek in Nevada County, tributary to Squirrel Creek thence Deer Creek thence Yuba River.

- Name of Diversion: None Diversion Capacity: Unknown

- Annual Water Use: Unknown

- Place of Diversion and Use: SW1/4 of SE1/4 of Section 24, T16N, R7E, MDB&M.

- Purpose of Use: Irrigation, Stock Watering, Domestic

- Owners of Record: Lake Wildwood Association

- Contact: 11255 Cottontail Way, Penn Valley, California 95946

- Statement Number: S001241

- Water is used under: Pre-1914 Right Year of First Use: 1861

- Source Name: Nigger Creek in Nevada County, tributary to Deer Creek thence Yuba River.

- Name of Diversion: Unnamed Diversion Capacity: 90 miners inches or 2.25 ft³/sec

- Annual Water Use: Unknown

- Place of Diversion: NW1/4 of NE1/4 of Section 28, T16N, R7E, MDB&M.

- Place of Use: Lake Wildwood

- Purpose of Use: Irrigation of 142 acres, Recreational

- Owners of Record: Stanley Baer

- Contact: PO Box 86, Grass Valley, California 95945

- Statement Number: S004750

- Water is used under: Pre-1914 Right Year of First Use: 1894

- Source Name: Blue Ravine Creek in Nevada County, tributary to Squirrel Creek thence Deer Creek thence Yuba River.

- Name of Diversion: None Diversion Capacity: None

- Annual Water Use: Unknown

- Place of Diversion and Use: NE1/4 of SE1/4 of Section 24, T16N, R7E, MDB&M.

- Purpose of Use: Irrigation

- Owners of Record: Robert K Hauser

- Contact: PO Box 373, Penn Valley, California 95946
- Statement Number: S008347
- Water is used under: Riparian claim Year of First Use: 1972
- Source Name: Unnamed stream in Nevada County, tributary to Squirrel Creek thence Deer Creek thence Yuba River.
- Name of Diversion: Unknown Diversion Capacity: Unknown
- Annual Water Use: 4 to 5 miners inches monthly, year-round
- Place of Diversion: NW1/4 of SE1/4 of Section 32, T16N, R7E, MDB&M.
- Place of Use: APN: 51-300-32/51-300-29
- Purpose of Use: Irrigation, Stock Watering, Fire Protection

- Owners of Record: Genevieve J Starbuck and Elbert C Starbuck

- Contact: PO Box 1380, Rohnert Park, California 94927-1380
- Statement Number: S008904
- Water is used under: Unknown Year of First Use: 1973
- Source Name: Eagle Ravine in Nevada County, tributary to Deer Creek thence Yuba River.
- Name of Diversion: Unknown Diversion Capacity: Unknown
- Place of Diversion: NW1/4 of NE1/4 of Section 7, T16N, R9E, MDB&M.
- Purpose of Use: Domestic

- Owners of Record: City of Nevada City

- Contact: 317 Broad Street, Nevada City, California 95959
- Statement Number: S010014
- Water is used under: Pre-1914 Right Year of First Use: Pre-1910
- Source Name: Little Deer Creek in Nevada County, tributary to Deer Creek thence Yuba River.
- Name of Diversion: Little Idaho Ditch/Nevada City Raw Water Reservoir
- Diversion Capacity: 4.5 ft³/sec Storage Capacity: 53.7 acre-feet
- Annual Water Use: 1859.8 acre-feet (max 1970), 1366.1 acre-feet (min 1976)
- Place of Diversion: NE1/4 of SE1/4 of Section 17, T16N, R9E, MDB&M.
- Purpose of Use: Municipal Supply (~3,000 population)

- Owners of Record: Nevada Irrigation District

- Contact: 1036 W Main Street, Grass Valley, California 95945
- Statement Number: S012949
- Water is used under: Pre-1914 Right Year of First Use: 1851
- Source Name: Deer Creek in Nevada County, tributary to Yuba River.
- Name of Diversion: Keystone Canal Diversion Capacity: 2 ft³/sec
- Annual Water Use: 700 acre-feet (max), 300 acre-feet (min)
- Place of Diversion: SW1/4 of NW1/4 of Section 20, T16N, R7E, MDB&M.
- Place of Use: Land within the District boundaries
- Purpose of Use: Domestic, Irrigation, Stock Watering, Fire Protection, and Recreation

- Owners of Record: Nevada Irrigation District

- Contact: 1036 W Main Street, Grass Valley, California 95945
- Statement Number: S012950
- Water is used under: Pre-1914 Right Year of First Use: 1851

- Source Name: Deer Creek in Nevada County, tributary to the Yuba River.
- Name of Diversion: Tunnel Canal Diversion Capacity: 30 ft³/sec
- Annual Water Use: 13,500 acre-feet (max), 7,000 acre-feet (min-drought)
- Place of Diversion: NW1/4 of SW1/4 of Section 18, T16N, R8E, MDB&M.
- Place of Use: Land within District boundaries.
- Purpose of Use: Domestic, Irrigation, Stock Watering, Fire Protection, and Recreation

- Owners of Record: Nevada Irrigation District

- Contact: 1036 W Main Street, Grass Valley, California 95945
- Statement Number: S012951
- Water is used under: Pre-1914 Right Year of First Use: 1851
- Source Name: Deer Creek in Nevada County, tributary to Yuba River.
- Name of Diversion: Newtown Canal Diversion Capacity: 21 ft³/sec
- Annual Water Use: 7,900 acre-feet (max), 6,100 acre-feet (min)
- Place of Diversion: NW1/4 of SE1/4 Section 12, T16N, R8E, MDB&M.
- Place of Use: Land within the District boundaries, including up to 61 acres for Irrigation
- Purpose of Use: Domestic, Irrigation, Stock Watering, Fire Protection, and Recreation

- Owners of Record: Nevada Irrigation District

- Contact: 1036 W Main Street, Grass Valley, California 95945
- Statement Number: S012952
- Water is used under: Pre-1914 Right Year of First Use: 1851
- Source Name: Deer Creek in Nevada County, tributary to Yuba River.
- Name of Diversion: D.S. Canal Diversion Capacity: 90 ft³/sec
- Annual Water Use: 34,300 acre-feet (max), 20,700 acre-feet (min, drought)
- Place of Diversion: SW1/4 of NE1/4 of Section 10, T16N, R9E, MDB&M.
- Place of Use: Land within the District boundaries
- Purpose of Use: Irrigation, Stock Watering, Domestic, Recreation, Fire Protection, Municipal, and Light Industrial

- Owners of Record: Ridgewood Ranch

- Contact: PO Box 250, Nevada City, California 95959
- Statement Number: S014213
- Water is used under: Riparian claim Year of First Use: 1930
- Source Name: Unnamed spring, tributary to North Fork of Deer Creek thence Deer Creek thence Yuba River.
- Name of Diversion: Dana Ranch Lower Spring Diversion Capacity: 5 gallons/minute
- Storage Capacity: 300 gallons
- Annual Water Use: 120,000 gallons (max), 30,000 gallons (min)
- Place of Diversion: NE1/4 of NW1/4 of Section 28, T17N, R10E, MDB&M.
- Place of Use: APN: 14-141-23/14-141-24/14-141-25, Section NE1/4 of NW1/4 of Section 28, T17N, R10E, MDB&M.
- Purpose of Use: Fire Protection, Irrigation, Domestic

- Owners of Record: Nevada Irrigation District

- Contact: 1036 W Main Street, Grass Valley, California 95945
- Statement Number: S014353 Year of First Use: 1851
- Water is used under: Pre-1914 Right and Riparian Claim

- Source Name: Deer Creek in Nevada County, tributary to Yuba River.
- Name of Diversion: Scotts Flat Dam Diversion Capacity: 96 ft³/sec
- Storage Capacity: 48,547 acre-feet
- Annual Water Use: 42,000 acre-feet (max), 25,000 acre-feet (min)
- Place of Diversion: NE1/4 of NE1/4 of Section 11, T16N, R9E, MDB&M.
- Place of Use: Land within the District boundaries
- Purpose of Use: Irrigation, Domestic, Stock Watering, Fire Protection, Recreation, Power

- Owners of Record: Trevor D Robbins and Sue A Robbins.

- Contact: 12583 Pinewoods Road, Nevada City, California 95959
- Statement Number: S016086
- Water is used under: Riparian claim Year of First Use: 1956
- Source Name: Hiscox Ravine in Nevada County, tributary to Gold Run thence Deer Creek thence Yuba River.
- Name of Diversion: Bailey Diversion Diversion Capacity: 15 gallons/minute
- Storage Capacity: 2.0 acre-feet
- Annual Water Use: 5.4 acre-feet (max), 2.65 acre-feet (min)
- Place of Diversion: APN: 37-080-40, SW1/4 of SE1/4 of Section 18, T16N, R9E, MDB&M.
- Place of Use: 14 acres of agricultural land ½ mile from Gold Flat Road
- Purpose of Use: Irrigation (tree farm, landscaping, garden), Dust Control, Fire Suppression

- Owners of Record: Trevor D Robbins and Sue A Robbins

- Contact: 12583 Pinewoods Road, Nevada City, California 95959
- Statement Number: S016087
- Water is used under: Riparian claim Year of First Use: 1940
- Source Name: Unnamed stream in Nevada County, tributary to Hiscox Ravine thence Gold Run Creek thence Deer Creek thence Yuba River.
- Name of Diversion: Robbins Pumphouse Diversion Capacity: 8 gallons/minute
- Storage Capacity: 2500 gallons
- Annual Water Use: 0.5 acre-feet (max), 0.2 acre-feet (min)
- Place of Diversion: APN: 38-080-40, SW1/4 of SE1/4 of Section 18, T16N, R9E, MDB&M.
- Place of Use: 14 acres of agricultural land ½ mile from Gold Flat Road
- Purpose of Use: Domestic household consumption

Certificates for Stockpond Water Right

Provisions were added to the California Water Code on January 1, 2001 for users to register appropriations for livestock stockponds. Stockponds are “a water impoundment structure constructed for livestock watering use not to exceed direct diversion of 4500 gallons per day, or diversion by storage of 10 acre-feet per year, as that use is defined by the board, and including impoundment for incidental aesthetic, recreational, or fish and wildlife purposes.” [Water Code § 1228.1(c)] “Stockwatering use means the use of water for commercial livestock.” (California Code of Regulations, title 23, § 669). More than one registration may be in effect if the stockponds do not exceed the ratio of one stockpond per 50 acres.

The following section provides information pertaining to the Certificates for Stockpond Water Rights in the Deer Creek watershed.

- User: Richard O. Konigsmark and Ellen H. Konigsmark. P.O. Box 95, Rough and Ready, California 95957. Priority of this right dates from 1967.

- Certificate Number: 995 Certified: February 13, 1980
- Right to the use of the water of unnamed stream tributary to Deer Creek, for a stockpond.
- Water right to collect and hold in storage 3.0 acre-feet of water for stock watering, including domestic and recreational use which is incidental to stock watering use.
- Location: Within the SW1/4 of NE1/4 Section 24, T16N, R7E, MDB&M in Nevada County.

- User: Robert L. and Irene H. Moore. 2646 14th Street, Sacramento, California 95818. Priority of this right dates from 1890.

- Certificate Number: 1071 Certified: August 29, 1978
- Right to the use of the water of unnamed stream tributary to Deer Creek, for a stockpond.
- Water right to collect and hold in storage 0.5 acre-feet for stock watering, including domestic and recreational use which is incidental to stock watering use.
- Location: Within the NW1/4 of SW1/4 Section 11 T16N R8E MDB&M in Nevada County.

- User: E. Wayne and Anne J MacFadden. Mooney Flat Road, Smartville, California 95977. Priority of this right dates from 1910.

- Certificate Number: 1505 Certified: June 12, 1980
- Right to the use of the water of unnamed spring tributary to Deer Creek, for a stockpond.
- Water right to collect and hold in storage 0.5 acre-feet of water for stock watering, including domestic and recreational use which is incidental to stock watering use.
- Location: Within the SW1/4 of NE1/4 Section 24, T16N, R6E, MDB&M in Nevada County.

- User: Charles Milton Loney and Mrs. June Loney Marco. 1525 Old Cypress Lane, Auburn, California 95603. Priority of this right dates from 1957.

- Certificate Number: 1968 Certified: August 21, 1980
- Right to the use of the water of Slacks Ravine, tributary to Deer Creek thence the Yuba River, for a stockpond.
- Water right to collect and hold in storage 1.3 acre-feet of water for stock watering, including domestic and recreational use which is incidental to stock watering use.
- Location: Within the NW1/4 of NW1/4 Section 36, T16N, R6E, MDB&M in Nevada County.

Small Domestic Use Registrations

Provisions were added to the California Water Code on January 1, 1989, for users to register appropriations for small domestic use, which do not exceed 4,500 gallons/day by direct diversion or 10 acre-feet per annum by storage. Aesthetic, recreational, or fish and wildlife preservation and enhancement purposes that are incidental to the domestic use may be included in a storage registration. California Water Code states “domestic use means the use of water in homes, resorts, motels, organization camps, camp grounds, etc., including the incidental watering of domestic stock for family sustenance or enjoyment and the irrigation of not to exceed one-half acre in lawn, ornamental shrubbery, or gardens at any single establishments [sic]. The use of water at a camp ground or resort for human consumption, cooking or sanitary purposes is a domestic use” [Water Code § 1228.1(c)].

- User: Richard F. Ellers and Marcia R. Ellers. 101 Providence Mine Road, Suite 102, Nevada City, California 95959. Date filed with the State Water Resources Control Board: June 8, 1989, renewed through June 7, 2014.

- Application: 29500R Registration Certificate No. R10

- Source of the water: unnamed stream (aka North Fork Little Deer Creek) in Nevada County, tributary to Little Deer Creek thence Deer Creek thence Yuba River. The water is for Domestic Use.

- The water appropriated shall be limited to the quantity which can be reasonably and beneficially used and shall not exceed 4,100 gallons/day by direct diversion and 8 acre-feet per annum by storage from November 1 of each year to June 1 of the succeeding year. The total amount of water to be taken from the source shall not exceed 9 acre-feet per water year of October 1 to September 30.

- Diversion and Property Location:

Diversion/Property Location – Reservoir One – Zone 2 North 580,700 feet and East 2,285,050 feet. Point is within NE1/4 of NW1/4 of Section 17, T16N, R9E, MDB&M.

Possibilities for Transfers or Dedications to Instream Flow

Lake Wildwood Association and NID

Lake Wildwood Association currently has a License for the Diversion and Use of Water in Deer Creek (License 10779, Application 23047, Permit 15779). Within their license is language that states “licensee shall release into Deer Creek below the damsite, 5.0 ft³/sec or the natural flow, whichever is less, year-round.” Based on data from the United States Geological Survey (USGS) streamflow gage on Deer Creek downstream of Lake Wildwood reservoir, the 5.0 ft³/sec allotment is not being achieved all of the time. Extensive hydrologic data analysis that was conducted as part of the Sierra Water Trust Project Assessment of Flow Augmentation Needs in the Deer Creek watershed indicated that there would typically be at least 5.0 ft³/sec of flow downstream from Lake Wildwood reservoirs location year-round during most water years. Based on the hydrologic data analysis, investigations were made into the possibility of securing additional instream flows by establishing contact with Division of Water Rights staff.

Division of Water Rights staff clarified many aspects regarding the 5.0 ft³/sec or the natural flow allotment downstream of Lake Wildwood reservoir. First, because NID and other upstream users have rights to the water in Deer Creek, it is difficult to prove that there is natural flow entering Lake Wildwood reservoir and unlikely there is any unappropriated natural flow in Deer Creek at certain times of the year. Second, the dam has multiple points where water seeps out and into the Deer Creek channel downstream, thus providing a small amount of flow directly below the dam site. Third, Lake Wildwood Association purchases water from NID, and the purchased water cannot be classified as natural flow. In addition to the water purchased by Lake Wildwood Association, NID sends additional water into the reservoir for re-diversion at the reservoirs Anthony House Dam into the Keystone and China/Union canals. It is likely that NID is sending excess “carriage” water into Lake Wildwood reservoir, to ensure Lake Wildwood receives the water they purchased and that there is enough water for re-diversion into downstream canals. Any water not purchased by Lake Wildwood Association and designated for re-diversion into the Keystone and China/Union canals would be classified as carriage water. Based on Lake Wildwood Associations water rights license, this carriage water would have to be passed downstream because Lake Wildwood cannot collect water for storage between April 1 and October 31. These small amounts of water are impossible to quantify given the existing flow monitoring infrastructure maintained by NID and Lake Wildwood Association near the reservoir, which uses staff plates and visual estimates to ensure deliveries are being met. Therefore additional stream flow gages were installed as part of this project. A gage was installed downstream of the reservoir at the Lake Wildwood weir in August 2011, and a gage will be installed at the reservoir inlet at the end of irrigation season in October or November 2011. With the new stream flow gages the amount of water entering Lake Wildwood reservoir will be able to be quantified more accurately

and any potential carriage water available for downstream transport can potentially be identified. On-going collaborations with Lake Wildwood Association and NID will ensure that the necessary data is available to properly evaluate our stream flow data so that the amount of carriage water can be determined. It is unlikely that the amount of carriage water is significant, but any additional instream flow downstream of Lake Wildwood reservoir would be beneficial during the summer and fall months. Securing additional instream flow is crucial for this vitally important stretch of creek because of the presence of anadromous fish, who spawn in Deer Creek in October and November, and the presence of a wastewater treatment plant that discharges effluent into the creek year-round.

As noted in the following section, NID will implement a year-round minimum instream flow in Deer Creek downstream to Lake Wildwood reservoir beginning in January 2012. It is the hope that Lake Wildwood Association will pass the minimum instream flow from NID through Lake Wildwood, to provide a minimum instream flow in the reach of creek downstream from Lake Wildwood reservoir. Based on the relationship Lake Wildwood Association has with SSI/FODC, it is expected that the Lake Wildwood Association will agree to pass the flow through their reservoir.

Foothill Water Network NID Water Rights Protest

The Foothill Water Network (FWN) and other organizations have been protesting the water rights permit and license petition for change and extension of time for NID's Lower Division, which includes the Deer Creek watershed from Scotts Flat reservoirs downstream to Lake Wildwood reservoir. The FWN and others have been negotiating with NID in an effort to agree to terms that will result in the dismissal of the protest. SSI/FODC provided information to help formulate and finalize the negotiation terms for Deer Creek, as information was lacking and the FWN requested data and information from our organization. The terms included Potential Studies for an NID Targeted EIR, and Potential Terms for Protest Dismissal so that the FWN would not file a lawsuit challenging NID's CEQA analysis of their water rights petition. The following provides a summary of the efforts undertaken by SSI/FODC during the protest and negotiations. SSI/FODC was not a signatory to the protest and was not actively involved in the negotiations with NID.

FWN looked to SSI/FODC to help define the interests and potential terms of dismissal that are applicable to Deer Creek. The following is a summary of the draft proposed remediations for Deer Creek, as of mid-August 2011.

NID's Water Rights Petition

NID's Water Rights Petition requested that NID's Upper Scotts Flat Reservoir be licensed to store water from any of NID's water rights at upstream points of diversion.

Geographic Area: Deer Creek - NID's Lower Scotts Flat (River Mile 23) to Lake Wildwood (River Mile 6)

Summary of Objectives

Thriving ecosystem, fish populations, and angling in Deer Creek between Lower Scotts Flat Reservoir and Lake Wildwood.

Description of Need Related to NID's Operations

At the end of irrigation season, NID ceases to convey water downstream of Lower Scotts Flat Reservoir. Currently, there is no minimum flow requirement downstream of Lower Scotts Flat Reservoir. The ecosystem and fishery that NID's conveyance flows facilitate in the summertime, is negatively impacted during non-irrigation season. During the transition between irrigation and

non-irrigation season flows can drop from high irrigation flows to no flow or single digit flows in the course of a day, which can strand fish and suddenly decrease habitat. The following is the draft stream remediation for Deer Creek, for which SSI/FODC contributed a large portion of the information.

Proposed Remediation

NID will implement the following remediation measures, starting in January 2012:

- Increase minimum instream flows through Nevada City to 5 cfs or a minimum flow schedule varying by year type and season.
 - Year-round. (Based on historic operations, in practice NID will increase minimum flows during the non-irrigation season between Oct. 15 – April 15.)
 - Minimum instream flows will be measured at the outlet at Lower Scotts Flat Reservoir.
 - Calculated minimum instream flows downstream of Lower Scotts Flat Reservoir will be made publicly available online through CDEC.
- Implement a ramping rate for flow releases from Scotts Flat when transitioning from irrigation season flows to non-irrigation season flows.
 - Ramp down over 1 week from Oct. 15 to Oct. 21.
 - The rate of ramp down should not exceed 10% of the difference between the Oct 1 flow and the minimum flow per hour. (We are willing to discuss application of a linear or a logarithmic calculation for the ramp down)
- Participate in Experimental Sediment Augmentation Program for Deer Creek.
 - In 2012, conduct study to identify location for gravel deposits, flows that will initiate gravel transport. Analysis should identify flows needed for transporting a range of gravel volumes and the frequency for deposition.
 - Design Experimental Gravel Augmentation Program for Deer Creek between Lower Scotts Flat Reservoir and Lake Wildwood.
 - Scale an existing gravel augmentation program to Deer Creek
 - Consider distribution points 2 miles downstream of Lower Scotts Flat.
 - Deposit gravel particles sized for trout.
 - Monitor gravel dispersal and deposition in relation to flows
 - Adapt the volume of gravel deposited, frequency, and location of deposition in relation to flows.
 - Implement Experimental Gravel Augmentation Program
 - NID will implement the experimental program based on an iterative process of deposition, monitoring, consultation, and adaptation.

Information Needs

1. Tested and calibrated calculated mass balance flow for flow release downstream of Lower Scotts Flat Reservoir.
2. Gravel augmentation
 - a. Gravel deficit, location for dispersal, flows that initiate gravel motion, and frequency of flows that initiate motion.
 - b. It is our plan that implementation of an experimental and adaptive gravel augmentation program will answer these information needs.

Benefits and Outcomes

The benefits of the proposed remediation include:

- Stabilize and increase resident rainbow trout and ecosystem habitat.
- Enhance trout spawning resulting in an increased fish population by restoring spawning gravels.
- Reduce stranding of fish by implementing a ramp-down at the end of irrigation season, Oct. 15th.
- Improve angling opportunities downstream of Lower Scotts Flat Reservoir through Nevada City.

Potential Interested Parties: NID, Friends of Deer Creek, Lake Wildwood, DFG, Foothills Water Network, American Rivers.

In conjunction with this agreement with NID, Foothills Water Network members will approach Lake Wildwood Association to request that they bypass NID's minimum instream flow from Lower Scotts Flat Reservoir through Lake Wildwood. If NID is going to provide a minimum instream flow, the Network needs to ensure that Lake Wildwood Association also preserves that instream flow for Deer Creek downstream of Lake Wildwood.

Future Water Rights Recommendations for the Deer Creek Watershed

- Monitor annual water rights developments that affect the Deer Creek watershed, using the State Water Resources Control Board Electronic Water Rights Information Management System <http://www.swrcb.ca.gov/ewrims/>. Updates are made on a monthly basis to EWRIMS.

- Work with NID, Lake Wildwood Association, Foothill Water Network and others, to monitor instream flow in Deer Creek using the stream flow gaging network installed as part of the Sierra Water Trust project, in conjunction with data from NID and the USGS, to evaluate whether the new minimum instream flow agreement is being achieved.

- Establish contact with water rights holders and initiate conversations regarding potential dedications to instream flow; Collaborate with water rights holders and assist them with the process of dedicating water for instream flows; Monitor flows and collaborate with NID and other water users to ensure dedicated water is passed through the natural system. It is possible users may be interested in dedicating a portion of their water rights to increasing the minimum instream flow in Deer Creek and other creeks in the watershed, to provide wildlife and aquatic enhancement benefits. These dedications would help offset the numerous impacts to water quality that occur throughout the watershed. The State Water Resources Control Board maintains a website with information pertaining to instream flow dedication: http://www.swrcb.ca.gov/waterrights/water_issues/programs/applications/instream_flow_dedication/. The Department of Fish and Game also maintains a website with information on instream flows: http://www.dfg.ca.gov/water/instream_flow_docs.html.

- Collaborate with and provide information to the Department of Fish and Game on the Instream Flow Assessment for Deer Creek. Deer Creek was listed on the Department of Fish and Game's August 2008 Priority Streams List for Instream Flow Assessment, pursuant to Public Resources Code Section 10004. As of September 2011 no assessment has started in the Deer Creek watershed, although assessments are underway for other streams higher up on the priority list. SSI/FODC and others should collaborate with the Department of Fish and Game on the assessment, if possible, and provide data and information to inform the process when relevant. It

is possible a collaboration and sharing of costs and time with Fish and Game might prompt the assessment being completed at an earlier date. Robert Holmes is the Instream Flow Coordinator for the Water Board, 916-324-0838.

- Continue the SSI/FODC water quality, habitat assessment, and streamflow monitoring programs. These programs can provide crucial data to inform the Instream Flow Assessment process referred to above.