BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE STATE OF IDAHO

IN THE MATTER OF APPLICATION TO APPROPRIATE WATER NO. 61-12090 IN THE NAME OF NEVID LLC	))))	**PRELIMINARY ORDER**

On September 28, 2006, Boise-Highland Development Co. filed an application to appropriate water with the Idaho Department of Water Resources ("IDWR" or "Department"). IDWR assigned number 61-12090 to the application.

On October 17, 2007, Boise-Highland Development Co. assigned ownership of application no. 61-12090 to Nevid LLC ("Nevid").

Notice of application no. 61-12090 was published on April 16 and 23, 2008. The application was timely protested by Daniel S. Van Grouw.

Application no. 61-12090 proposes the appropriation of 5.0 cubic feet per second ("cfs") for a 176 unit subdivision on 300 acres located in Elmore County.

On April 7, 2009, the Department conducted a hearing for the contested case. Based on evidence presented at the hearing, the hearing officer finds, concludes, and orders as follows:

FINDINGS OF FACT

1. Application to appropriate water no. 61-12090 proposes the following:

Purpose of Use:		Municipal
Source:		Ground water
Flow Rate:		5.0 cubic feet per second ("cfs")
	Uses Within Municipal Use:	
	In house domestic	0.60 cfs
	Irrigation	2.76 cfs
	Commercial	0.04 cfs
	Fire Protection	2.20 cfs
Points of Diversion:		SESE[1], Section 2; SWNE, NWSE, and NENE, Section 11; all located in Township 1 South, Range 4 East.
Place of Use:		Township 1 South, Range 4 East, Section 2, NESE, S1/2SE, and Section 11, NE, NWSE

2. Nevid named the proposed development "Elk Creek Village." Elk Creek Village is the first phase of a larger development referred to as "Elk Creek Canyon." The Elk Creek Canyon development includes both the 300 acres that is the subject of this application and an additional 400 acres located east of the 300 acres. In addition, Nevid also owns or has the option to acquire 1,351 acres located in Sections 5, 6, 7 & 8 of Township 1 South, Range 5 East. This property is located approximately one-half mile east of the Elk Creek Canyon proposed development.

3. Approximately 176 lots will be platted within the Elk Creek Village. The application originally proposed the irrigation of approximately 88 acres associated with the residential lots. In addition, the application proposed irrigation of 50 acres of common area. Nevid computed the proposed irrigation flow rate of 2.76 cfs by multiplying the total 138 irrigated acres by 0.02 cfs.

4. Total annual ground water withdrawal is estimated to be approximately 580 acre-feet. Average annual consumptive use is estimated to be approximately 420 acre-feet.

5. At the hearing, Nevid presented evidence that approximately 1/3 acre will be irrigated for each lot on which a home is constructed. This would result in the irrigation of approximately 59 acres.

6. With the reduced irrigated acres, at a rate of 0.02 cfs per acre, the flow rate for irrigation of 59 acres associated with the residential lots would be 1.18 cfs, and the flow rate for irrigation of 50 acres of common area would be 1.00 cfs, for a total flow rate of 2.18 cfs.

[1] Public land survey descriptions in this decision without a fraction following a two alpha character descriptor are presumed to be followed by the fraction "1/4." In addition, all public land survey descriptions are presumed to be based on the Boise Meridian. All locations are in Elmore County.

7. IDWR standards recognize a volume of 0.6 acre-feet annually per home for in-house use. IDWR also allows a maximum volume of four acre-feet per acre of irrigated land for growing crops at the location of the proposed development.

8. The annual volume of water needed for in-house use is 176 x 0.6 = 106 acre-feet. The annual volume of water needed for irrigation of lots associated with homes is 176/3 x 4.0 = 235 acre-feet. Approximately four acre-feet is an estimate of the volume of water needed for commercial use. The total projected annual volume of water needed for home and commercial use is 345 acre-feet.

9. Nevid owns the 300 acre place of use free and clear of indebtedness. Nevid has spent $500,000 to $1,000,000 in engineering and design. Nevid has submitted a conceptual design to Elmore County for approval.

10. Elk Creek Village will be a master planned subdivision under the planned community portions of the Elmore County ordinances.

11. Nevid submitted two technical reports calculating an estimate of a water balance for a limited area surrounding the proposed Elk Creek Village development and an estimated recharge area up-gradient from the development that might contribute recharge to the ground water underlying this area.

12. The first report, dated December 17, 2007, assumed a radial area for recharge of approximately two miles from the proposed development. Nevid refers to this area as a "contributing basin." The two mile area was extended to the northeast approximately in the direction of up gradient surface topography until it encountered the upland recharge areas in the Danskin Hills.

13. IDWR staff prepared a staff memorandum (Exhibit 4), dated February 24, 2009 that evaluated "aquifer recharge in areas of planned community applications along the I-84 corridor from Boise to Mountain Home." The memorandum identified "11 pending applications to appropriate water for planned communities along the I-84 corridor with a total combined appropriation of 172 cfs." The report concluded that "aquifer recharge is limited in the surrounding area . . .."

14. After reviewing reports prepared by IDWR staff regarding an adjacent proposed subdivision (attached to Exhibit 4), Nevid prepared a second report. The second report is dated March 30, 2009. The second report reduced the radial area for the "contributing basin" to approximately one mile. The second report extended this smaller area to the northeast approximately in the direction of up gradient surface topography until it encountered the upland recharge areas in the Danskin Hills.

15. The March 30, 2009 report estimated the range of annual volumetric recharge within the identified area from a low of 2,400 acre-feet per year to a high of 8,400 acre-feet per year.

16. Nevid used different methods to determine the low and high estimates of recharge. Nevid estimated the upper annual recharge volume of 8,400 acre-feet per year by

using an evapotranspiration value computed with SEBAL (Surface Energy Balance Algorithm for Land). SEBAL indirectly estimates evapotranspiration by determining the intensity of infrared reflection from plants that are evapotranspiring and comparing the intensity of the infrared reflection to calibrated values of evapotranspiration.

17. The dominant land type in the area of this development is rangeland. Infrared reflectance values for rangeland plants are very poor, and calibration is difficult. SEBAL is not a reliable method of determining rangeland evapotranspiration. Consequently, the hearing officer rejects the upper value of recharge calculated by the applicant.

18. Nevid calculated the lower recharge value of 2,400 acre-feet per year using evapotranspiration estimates derived from data gathered at a weather station located at Anderson Ranch Dam. The evapotranspiration values at Anderson Ranch Dam are similar to evapotranspiration values derived by IDWR staff using data from the Boise Seven North weather station located in the foothills west and north of Boise. The use of data from the Anderson Ranch Dam weather station is a reliable means of estimating evapotranspiration at the development site.

19. To compute the recharge value of 2,400 acre-feet per year, Nevid divided the contributing basin, or the recharge area, into two sub-areas. The upper one-third of the area is identified as granitic rock in the upper Sand Hollow Creek and Bowns Creek watershed. In its computations, Nevid assumed that all water falling on the upper granitic area that is not consumed by evapotranspiration contributes to surface water flows in the ephemeral streams whose channels run through the contributing area. Nevid further assumed that all of this surface water flow contributes to recharge of the target aquifer from which Nevid proposes to divert ground water.

20. The lower two-thirds of the contributing area is characterized as the "capture area." Nevid assumed five percent of the precipitation that falls on the capture area would also contribute to recharge.

21. By adding all the surface water flow derived from the upland area with five percent of the precipitation falling on the capture area, Nevid computed an annual recharge value of 2,400 acre-feet.

22. Nevid computed a recharge value of 2,400 acre-feet to the target aquifer by estimating the highest value of recharge for surface water runoff (100 percent) and also a high value for percolation in the capture area (5%). The USGS and the Department estimate a percentage of precipitation recharge to the target aquifer underlying the capture area of two to three percent of precipitation. In addition, other computations of recharge from surface water streams estimate recharge less than 100 percent. For instance, a previous computation of recharge by Nevid's consultant in an adjoining basin estimated that 14% of the surface runoff actually recharges the target aquifer (See Attachment to Exhibit 4).

23. To calculate a low value for recharge, the hearing officer assumes: (a) three percent of the precipitation in the capture area recharges the shallow aquifer system rather than five percent; and (b) surface channel seepage recharge to the target aquifer is 14 percent of the difference between precipitation and evapotranspiration. Three percent of the average

precipitation in the capture area (14,800 acre-feet per year) is 444 acre-feet per year. In addition, 14 percent of the difference between precipitation and evapotranspiration on the granitic uplands is assumed to recharge the target aquifer system as surface channel seepage. The average annual precipitation in the upper Sand Hollow and Bowns Creek basins is 9,500 acre-feet per year. The evapotranspiration for plants growing on the 5,400 upland acres is computed by multiplying the upland acres by the estimated upland evapotranspiration of 1.26 acre-feet per acre. The computed evapotranspiration in the upland area is 6,804 acre-feet per year. Subtracting 6,804 acre-feet from 9,500 acre-feet results in a difference of 2,696 acre-feet. Fourteen percent of 2,696 acre-feet is 377 acre-feet of recharge annually from the uplands. Adding the recharge from the uplands (377 acre-feet per year) to the estimated infiltration in the capture area (444 acre-feet per year) yields a total recharge of 821 acre-feet per year. Because of other ground water withdrawals, the amount available for appropriation is 10 acre-feet less than the total recharge, or 811 acre-feet per year.

24. Nevid's computations of recharge assume there is no effect on the target aquifer from other ground water withdrawals outside of the contributing area. This assumption increases the estimate of ground water available for appropriation

25. Nevid's method of estimating recharge also assumes that, because of the location of the proposed development, all water recharging the aquifer up-gradient from the proposed development is available for appropriation. Precipitation on the granitic uplands is a major source of recharge for the aquifer system down gradient from the Elk Creek Village development. As a result, the total water within the aquifer is more limited than estimated by Nevid.

26. There is a demand for housing in the Treasure Valley area. The area proposed for development has potential for growth with limited water resources available to supply the development. Presently, there are 11 significant applications to appropriate water proposing points of diversion from ground water in the vicinity of the points of diversion proposed by this application.

27. Ground water is presently the sole source of potable and culinary water in the vicinity of the Elk Creek Village development.

28. The applicant intends to irrigate parks, common areas, and ball fields with treated water from an independent sewage treatment facility.

CONCLUSIONS OF LAW

1. Idaho Code § 42-203A states in pertinent part:

> In all applications whether protested or not protested, where the proposed use is such (a) that it will reduce the quantity of water under existing water rights, or (b) that the water supply itself is insufficient for the purpose for which it is sought to be appropriated, or (c) where it appears to the satisfaction of the director that such application is not made in good faith, is made for delay or speculative purposes, or (d) that the applicant has not sufficient financial resources with which to complete the work involved therein, or (e) that it will conflict with the local public interest as defined in section 42-202B, Idaho Code, or (f) that it is contrary to conservation of water resources within the state of Idaho, or (g) that it will adversely affect the local economy of the watershed or local area within which the source of water for the proposed use originates, in the case where the place of use is outside of the watershed or local area where the source of water originates; the director of the department of water resources may reject such application and refuse issuance of a permit therefor, or may partially approve and grant a permit for a smaller quantity of water than applied for, or may grant a permit upon conditions.

2. The applicant bears the ultimate burden of proof regarding all the factors set forth in Idaho Code § 42-203A.

3. Idaho Code § 202B(3) defines the local public interest as follows:

> "Local public interest" is defined as the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource.

4. Idaho Code § 202B(6) defines municipal purposes as follows:

> "Municipal purposes" refers to water for residential, commercial, industrial, irrigation of parks and open space, and related purposes, excluding use of water from geothermal sources for heating, which a municipal provider is entitled or obligated to supply to all those users within a service area, including those located outside the boundaries of a municipality served by a municipal provider.

5. Idaho Code § 202B(5)(c) defines municipal provider to include:

> A corporation or association which supplies water for municipal purposes through a water system regulated by the state of Idaho as a "public water supply" as described in section 39-103(10), Idaho Code.

6. It is in the local public interest to promote the full use of the limited ground water resources in the desert areas that approximately straddle the Ada County - Elmore County border. There are many developments proposed in this area. It would not be in the public interest to approve an appropriation of water that could significantly commit a large portion of the ground water resources to a single development.

7. Nevid implicitly asserts that it should be entitled to all or a major portion of all the estimated recharge within or up-gradient of the proposed Elk Creek Village development. Because its property is located closer to the Danskin Hills than other down gradient properties, Nevid argues that it should be able to capture all or a significant portion of the recharge water derived from the Danskin Hills to the exclusion of down gradient landowners.

8. The doctrine of prior appropriation harshly recognizes that the first appropriator in time receives all the water before the next appropriator receives any water. If IDWR strictly applied notions of the prior appropriation doctrine when it considers applications to appropriate water, Nevid might be entitled to all the unappropriated water recharging up gradient from the Elk Creek Village property.

9. The local public interest definition requires, however, that IDWR consider "the interests that the people in the area directly affected by a proposed water use have in the effects of such use on the public water resource." Because of the limited ground water supply in the area of the proposed points of diversion, it is in the local public interest to restrict ground water use to in-house use and limited irrigation of lots associated with constructed homes.

10. Common areas within the proposed development should only be irrigated with treated waste water from homes and other culinary or potable uses.

11. The irrigation portion of the water right should be limited to a flow rate of 1.18 cfs. The total flow rate authorized for municipal use should be limited to 1.82 cfs. A separate purpose of use for fire protection should be limited to 2.20 cfs. The total flow rate authorized should be limited to 4.02 cfs. The total volume diverted should be limited to 345 acre-feet.

11. The development will not injure other water users if properly limited.

12. The water supply is sufficient if the use is properly limited.

13. The applicant has sufficient resources to complete the project.

14. The application is not filed for purposes of speculation, delay or in bad faith.

15. Use of water proposed is in the local public interest if limited to in-house use and irrigation of not more than one-third acre associated with each constructed house.

16. The application, if properly limited, will result in the conservation of the waters of the state of Idaho.

ORDER

IT IS HEREBY ORDERED that application to appropriate water no. 61-12090 is **Approved.**

IT IS FURTHER ORDERED that the diversion rate and annual volume for water right no. 61-12090 is limited to no more than the following:

	Flow Rate		Volume
Municipal Use:	1.82 cfs		345 acre-feet
Fire Protection	2.20 cfs		(no additional volume added)
Total Flow	4.02 cfs	Total Volume	345 acre-feet

IT IS FURTHER ORDERED that permit no. 61-12090 is subject to the following conditions:

Proof of application of water to beneficial use shall be submitted on or before July 1, 2014.

Subject to all prior water rights.

Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.

Place of use is within the area served by the public water supply system of Elk Creek Village. The place of use is generally located within Township 1 South, Range 4 East, Section 2, NESE, S1/2SE, and Section 11, NE, NWSE.

Prior to the diversion of water in connection with this right, the right holder shall provide the Department with a plan for monitoring ground water levels in the vicinity of the place of use for this water right. The monitoring should occur in parallel with development and production and should include identification of non-producing wells and timelines for measuring and reporting. The right holder shall not divert water in connection with this right until the monitoring place is approved by the Department. Failure to comply with the monitoring plan once it is accepted shall be cause for the Department to cancel or revoke this right.

Prior to or in connection with the proof of beneficial use statement to be submitted for municipal water use under this right, the right holder shall provide the Department with documentation showing that the water supply system is being regulated by the Idaho Department of Environmental Quality as a public water supply and that it has been issued a public water supply number.

After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.

Common areas, parks, school grounds, golf courses, and any other large parcels may only be irrigated under this water right with wastewater that has been previously beneficially used for potable or culinary purposes, has been treated in a wastewater treatment plant, and is delivered to the parcel irrigated.

The direct irrigation occurring under this municipal use shall not exceed 1/3 acre within each platted subdivision lot upon which a home has been constructed. This right does not provide for the direct irrigation of lots upon which homes have not been constructed

A map depicting the place of use boundary for this water right at the time of this approval will be attached to the approval document for illustration purposes.

Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had not control.

The Director retains jurisdiction to require the right holder to provide purchased or leased natural flow or stored water to offset depletion of Lower Snake River flows if needed for salmon migration purposes. The amount of water required to be released into the Snake River or a tributary, if needed for this purpose, will be determined by the Director based upon the reduction in flow caused by the use of water pursuant to this permit.

Dated this 23rd day of June, 2009.

Gary Spackman
Hearing Officer

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 25th day of June, 2009, a true and correct copy of the above and foregoing document described below was served by placing a copy of the same in the United States mail, postage prepaid and properly addressed to the following:

Document(s) Served: Preliminary Order, and Statement of Available Procedures and Applicable Time Limits for Responding to Preliminary Orders

DANA HOFSTETTER
HOFSTETTER LAW OFFICE
608 W FRANKLIN ST
BOISE ID 83702

NORMAN M SEMANKO
ROSE LAW GROUP BORTON
6223 N DISCOVERY WAY, STE 200
BOISE ID 83713

SPF WATER ENGINEERING
ATTN ROXANNE BROWN
300 E MALLARD DR STE 350
BOISE ID 83706

Deborah J. Gibson

Deborah J. Gibson
Administrative Assistant
Water Management Division