

SUPERSEDING TRUST WATER RIGHT AGREEMENT

This Trust Water Right Agreement (“Agreement”) is entered into by and between the State of Washington, Department of Ecology (“Ecology”), and Northland Resources, LLC, a Washington limited liability company doing business as Sapphire Skies (“Sapphire Skies”), each of which are also referred to individually as a “Party” and collectively as “Parties”, pursuant to Chapters 90.38 and 90.42 RCW. This Agreement supersedes the Trust Water Agreement between the parties dated May 13, 2010, and as amended on June 2, 2010, July 2, 2010, and April 8, 2011.

RECITALS

A. Ecology is the trustee of the Yakima River Basin Trust Water Rights Program as authorized under Chapter 90.38 RCW (the “Trust”).

B. Sapphire Skies manages several LLCs, which are collectively referred to as “Sapphire Skies” for the purposes of this Agreement.

C. Sapphire Skies has filed applications with Ecology to place certain water rights into the Trust for purposes of enhancing instream flows and providing mitigation water to offset and allow for permitting of new water rights to be used for any lawful purpose within the Yakima River basin. Ecology has accepted these applications, completed its analysis of the extent and validity of the water rights, and the consumptive portion of the water rights. Ecology has approved these applications for instream flow purposes and water banking (“Instream Flow Water Rights”), which are attached under Attachment A, and are more particularly described as:

1. *Acquavella* Court Claim No. 02223; Trust Water Right No. CS4-02223CTCLsb2@1 (“Pasco Right”).
2. *Acquavella* Court Claim No. 02222; Trust Water Right No. CS4-01676(B)CTCL@1 (“Newton Right”).
3. *Acquavella* Court Claim No. 00365; Trust Water Right No. CS4-00365CTCLsb5 (“Henshaw Right”).

D. Subject to the terms of this Agreement and the applications, Ecology confirms that it is willing, able, and authorized to hold the Instream Flow Water Rights in the Trust as provided for herein.

AGREEMENT

In consideration of the foregoing, and the mutual covenants and undertakings as hereinafter set forth, and other good and valuable consideration, the receipt of which is hereby acknowledged, the Parties hereto hereby agree as follows:

A. The purpose of this Agreement and the primary reason Sapphire Skies is willing to place the Instream Flow Water Rights into the Trust is to provide senior water rights as off-setting mitigation that will allow Sapphire Skies and third parties to apply for and receive new ground water withdrawal or surface water diversionary permits or water budget neutral determination within the Yakima River basin, particularly within Kittitas County. These new water rights will be mitigated by way of a permanent designation of such portion of Instream Flow Water Rights as reasonably required to ensure no impairment to TWSA or other water rights; provided, however, that any portion of such mitigation may also be provided by other means.

B. This Agreement shall be effective upon its mutual execution of the parties. The term of this Agreement shall then be for so long as any portion of the Instream Flow Water Rights remains in the Trust (the "Term").

C. Definitions

1. "Dedicated Rights" means the designation of the Instream Flow Water Rights identified in paragraph C to serve as mitigation for the permits and permit applications in paragraphs E and F.

2. "Committed Rights" means those Dedicated Rights that are designated by Sapphire Skies to offset the new Water Rights as the new Water Rights are developed, and the Dedicated Rights have transferred by deed to Ecology.

3. "Uncommitted Rights" means the portion of the Dedicated Rights no longer required to be Committed Rights as mitigation for the permits and permit applications in paragraphs E and F, and a commensurate reduction or surrender of equivalent permitted amounts Dedicated under the applications and permits in paragraphs E and F is completed.

D. The Trust is deemed to have commenced by transfer by deed to the Trust of a portion of the Instream Flow Water Rights, which deeds are attached, Attachment B, and as more particularly described as:

1. 101 afy - the Pasco Right.
2. 70.495 afy of the Newton Right.
3. 20.9 afy of the Henshaw Right.

The Instream Flow Water Rights not deeded to the Trust at the time of signing the Agreement will be transferred by deed as provided in paragraph I. No portion of the Instream Flow Water Rights may be Committed to the development of the Water Rights in paragraphs F and G and Third Party Sales as provided in Paragraph J below unless and until the Instream Flow Water Rights are deeded to the Trust and a commensurate reduction or surrender of equivalent permitted amounts Dedicated under the applications and permits in paragraphs E and F is completed.

E. Sapphire Skies has filed applications for new water rights utilizing a portion of the Instream Flow Water Rights to offset the impacts of the new withdrawals proposed. These applications are as follows:

G4-35246 - Fircrest
G4-35247 - Flatwater
G4-35248 - Forest Ridge
G4-35249 - Little Creek
G4-35250 - Woods and Steele
G4-35251 - Meadow Springs
G4-35273 - City Heights
R4-35364 - Henshaw Reservoir
S4-35365 - Green Canyon (Diversion)
S4-35366 - Green Canyon (Secondary)
G4-35448 - Pine View (WBN)
G4-35449 - Pine View (WBN)
G4-35450 - Pine View (WBN)
G4-35451 - Pine View (WBN)
G4-35294 - Timber Ridge (MC Ten)

F. Ecology has approved the applications for the new water rights (“Water Rights”) that are conditioned and intended to be offset with the Instream Flow Water Rights for:

G4-35247 - Flatwater
G4-35248 - Forest Ridge
G4-35250 - Woods and Steele
G4-35251 - Meadow Springs
G4-35273(A) - City Heights
G4-35273(B) - Meadow Ridge
G4-35273(C) - Ponderosa Pines
R4-35364 - Henshaw Reservoir
G4-35448 - Pine View (WBN)
G4-35449 - Pine View (WBN)
G4-35450 - Pine View (WBN)
G4-35451 - Pine View (WBN)
G4-35294 - Timber Ridge (MC Ten)

The consumptive use of Instream Flow Water Rights as set out in Attachment C are available to be dedicated and committed to the Water Rights as provided in the Water Right Decisions.

G. Ecology shall timely process the remaining applications G4-35246 - Fircrest, S4-35365 - Green Canyon (Reservoir Diversion), and S4-35366 - Green Canyon (Reservoir Secondary) (“Applications”) utilizing such portion of the Instream Flow Water rights as reasonably needed to offset the new withdrawals.

H. Commitment of Dedicated Instream Flow Water Rights

At such time that Ecology approves an Application, Sapphire Skies shall Dedicate Instream Flow Water Rights to offset the impacts of the Application if approved.

I. Committed and Uncommitted Instream Flow Water Rights

1. Sapphire Skies shall retain the right and control of the Dedicated Rights for the purpose of determining when and in what quantity the Dedicated Rights for a new Water Right will be committed, as Committed Rights, to offset the new Water Rights as the new Water Rights are developed. Sapphire Skies shall provide notice to Ecology of the Dedicated Rights to be committed as mitigation for incremental development the new Water Rights.

2. Uncommitted Rights may be used for Third Party Agreements as described in Paragraph J below.

3. If at the time of completion, Committed Rights are not necessary to mitigate or offset the actual consumptive use under any of the Water Rights in paragraphs E and F , the remaining available unnecessary portion of the Committed Instream Flow Water Rights shall be available for Third Party Agreements as described in Paragraph J below.

4. The new Water Rights are conditioned upon Ecology approval of a storage plan for the non-irrigation mitigation. To comply with this term and provide water to offset winter impacts from the new Water Rights, at the time Sapphire Skies commits Dedicated Rights under I.1, Ecology may, in lieu of requiring Sapphire Skies to provide mitigation storage under Water Right No. R4-35364, assign a portion of the Committed Rights to the Bureau-Ecology Storage and Exchange Contract. Such an assignment will be determined by Ecology under its authority provided in terms of the Exchange Contract. If Ecology determines it to be consistent with terms of the Exchange Contract, Ecology may also reassign any Committed Rights assigned to the Bureau-Ecology Exchange to projects under Third Party Agreements described in Paragraph J below if a portion or all of the Committed Rights are not necessary to mitigate or offset the actual consumptive use at the time of completion of the project.

5. Sapphire Skies agrees to pay costs or fees associated with Ecology's assignment of a portion of the Trust Water Rights to the Bureau-Ecology Storage and Exchange Contract.

6. If Sapphire Skies elects to assign Water Right No. G4-35273 for the City Heights Project to the City of Cle Elum, it may file such assignments in increments consistent with the development phases of the Project. Instream Flow Water Rights will be committed with the assignments for the development phases of the Project and may be exercised and managed by the City within its portfolio of water rights, including the authority to fully exercise Water Right No. G4-35273 during the irrigation season.

J. Third Party Sales

The process for Sapphire Skies' sale of any uncommitted water in Trust to third parties, and the corresponding issuance of mitigated permits or water budget neutrality determinations by Ecology, shall be as follows:

1. Sapphire Skies will propose or enter into a contract with a third party to provide a portion of the water in Trust as mitigation on such terms consistent with this Agreement as Sapphire Skies may elect, Sapphire Skies or such third party shall make applications to Ecology (or, if appropriate, to a Water Conservancy Board) for a water budget neutrality determination or to appropriate surface or ground water at the desired location and for the intended use and quantities, together with all regularly required supporting information (each, hereinafter a "New Application"). As part of the New Application, Ecology will assist in designating the specific quantity of the water in Trust as required to offset the consumptive loss associated with the uses described on the New Application.

2. Ecology will process the New Application in accordance with applicable law, utilizing such portion of the water in Trust which is reasonably necessary to offset the impacts of such new withdrawal.

3. If necessary or appropriate, Ecology will complete a Water Transfer Working Group ("WTWG") project description and will present it to the WTWG. Ecology, in consultation with the U.S. Bureau of Reclamation, will determine if some or all of the water that Sapphire Skies or the third party applicant designates would be assigned to the Reclamation-Ecology storage and delivery exchange contract ("Reclamation-Ecology Exchange Contract").

4. Ecology will investigate the New Application and recommend issuance or denial of a permit or a determination of water budget neutrality based on applicable policy, rules, and law. Ecology's review of New Application shall also include the following considerations:

a. In order to develop and confirm performance standards as set forth in any respective report of examination or determination of water budget neutrality, Ecology and such third party shall provide information to reasonably show or estimate, as the case maybe, that the consumptive uses of the proposed project, when offset by the mitigation water allocated from the Trust and any other proposed mitigation measures, do not increase the consumptive use of water.

b. With regard to domestic uses and so long as withdrawals are metered to users; and the subject project is, or will be made, subject to covenants, conditions, and restrictions which impose water use restrictions for both inside and outside purposes which will be recorded against the project; and reasonable water use enforcement provisions are provided; and return flows are provided for through an approved septic or other waste treatment facility reasonably designed to infiltrate treated water in the general area from which it is being withdrawn, the allocation of Trust water for mitigation shall be at a rate of not more than 0.392 acre-feet (350 gallons per day on a year round basis) per equivalent residential unit ("ERU"), or

such greater amount as required by the Kittitas County Department of Health for serving a residential dwelling.

c. Ecology's permit or determination of water budget neutrality relative to a New Application will specify the conditions and limitations on the use of water in a manner consistent with the water held in the Yakima Pilot Water Bank as mitigation. Conditions relating to measuring and reporting water use and for reimbursement of any Ecology costs to administer the Reclamation-Ecology Exchange Contract will also be included in the permit.

d. If issued, Ecology's permit or determination of water budget neutrality relative to a New Application will specify the conditions and limitations on the use of water in a manner consistent with the water held in the Yakima Water Bank as mitigation.

e. If all or a portion of the water is deemed adequate to fully mitigate a New Application, then the third party, upon receipt of final approval from Kittitas County of its land use applications for development of the real property that is the intended place and purpose of use of the New Application, and exhaustion of all applicable appeal periods thereof, the third party applicant (beneficiary of the water) shall execute such documentation as necessary to irrevocably and perpetually commit the water to Trust for purposes of offsetting the New Application.

5. If Ecology intends to issue an ROE for a New Application, it will publish the draft ROE on its Internet site. If Ecology intends to issue a determination of water budget neutrality, it shall notify Sapphire Skies. If the form and substance of the draft ROE or water budget neutrality determination is acceptable to Sapphire Skies or the third party, Sapphire Skies or the third party applicant promptly shall cause an escrow to be opened for such transaction at the Escrow Agent. All escrow costs shall be borne by Sapphire Skies, or as otherwise set forth in the written escrow instructions or sale agreement between Sapphire Skies and the third party. Sapphire Skies and any third party having the right to do so under an agreement with Sapphire Skies, may, at any time prior to closing of escrow and without cause or penalty, withdraw the New Application or otherwise prevent any allocation of any portion of the water to such transaction.

K. Management of Trust Water

During the Term and in its capacity as a fiduciary, Ecology:

1. Shall hold and manage the water in trust pursuant to chapter 90.38 RCW and this Agreement as a part of the total water supply available ("TWSA") in the Yakima River. Ecology shall take no position and make no assertions that the quantities and beneficial use of the water is other than as stated in the Reports of Examination for Trust Water Right No. CS4-02223CTCLsb2@1 ("Pasco Right"); Trust Water Right No. CS4-01676(B)CTCL@1 ("Newton Right"); Trust Water Right No. CS4-00365CTCLsb5 ("Henshaw Right"), and this representation shall also apply to any water removed from the Trust;

2. Shall, in addition to the protections against relinquishment in RCW 90.14.140(2)(h), at all times during the Term manage, maintain, preserve and protect for the benefit of Sapphire Skies and its successors, designees and assigns all aspects and attributes of the water, including, but not limited to, the priority date, the total diversionary right, instantaneous quantity, and annual consumptive quantity from impairment, challenges, claims and relinquishment;

3. Shall, as expeditiously as reasonable, process the applications described in Paragraph E above, and any New Application where all or a portion of the water is proposed as mitigation and shall take all steps necessary to comply with any restrictions imposed by other agreements to which Ecology may be subject, including, but not limited to memorandums of agreement and groundwater moratoriums or subsequently enacted water right processing rules; and

4. Shall not assess or charge Sapphire Skies any costs or fees for maintaining the water in the Trust. The foregoing shall not be construed to prohibit Ecology from charging: its regular, published costs and fees for water right applications, transfers and investigations; costs attributable to assignment of a portion of the water to Ecology's USBR contract for storage and exchange contract; and fees associated with assignment of water in the Trust to offset impacts associated with the new Water Rights and the applications.

5. May, following required consultation, assign some or all of the committed Trust Water Rights to Bureau-Ecology Storage and Exchange Contract.

L. Water Budget Neutral Projects

1. Ecology will make determinations on requests for water budget neutral projects only after making the following findings as provided under the emergency rule, chapter 173-539A WAC:

a. Sapphire Skies shall demonstrate that each request for water budget neutral determination complies with the definition of "group use" which includes use of the ground water permit exemption for all parcels that are proximate and based on common ownership. Sapphire Skies shall determine whether an applicant for which it proposes to assign mitigation credits holds any legal or equitable interest in any proximate parcels.

b. Sapphire Skies must identify the Mitigation Credits required to offset the consumptive use associated with the water budget neutral projects and serve as mitigation for impacts to TWSA.

c. The determinations for the water budget neutral projects will be based on a maximum standard of 350 gallons per day ("gpd") per connection for indoor water use;¹ provided that if Ecology issues such determinations, this allocation of 350 gpd will be

¹ The 350 gpd per connection represents an allocation of 70 or 105 gpd per connection consumptive water use based on the 20% consumptive use for a sanitary sewer system and 30% consumptive use for residential septic system, respectively, under WAC 173-539A-050(3).

reduced and the commitment of Mitigation Credits in the Exchange may be credited back to Sapphire Skies based upon the following:

i. Ecology determines in rule, policy, or in any decision a standard lower than the 350 gpd/connection for calculating the average indoor water use is applicable to single-family residences.

ii. Sapphire Skies may provide Ecology with three years of monitoring data of indoor water use for the purpose of showing that the actual average water used indoor is less than a 350 average gpd. Monthly indoor water use will be calculated based on the average of the monthly total water use during the non-irrigation season period of November – March. Sapphire Skies shall provide the data based on monthly total water use consumption.

d. Unless Sapphire Skies accepts as permanent a new standard adopted by Ecology under subparagraph 1.c.i above, the standard for the water budget neutral projects shall be the actual average gallons per day used based on the monitoring data. Mitigation Credits from the Exchange will be credited back to Sapphire Skies based on the difference between the consumptive use of indoor water use calculated at 105 gpd/connection and the consumptive average water use calculated based on the monitoring and data collection.

L. Notice Provisions

All notices required pursuant to this Agreement shall be sent or hand delivered to the following, with evidence of delivery provided:

To Sapphire Skies:

Sapphire Skies
Attn: David Blanchard
206 W. 1st St.
Cle Elum, WA 98922

With a copy to:

Tom McDonald
Cascadia Law Group PLLC
606 Columbia Street NW, Suite 212
Olympia, WA 98501

To Ecology:

Department of Ecology
Attn: _____
15 W. Yakima Ave., Suite 200
Yakima, WA 98902-3452

DATED this 6 day of ^{January 2012}~~December~~ 2011.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

SAPPHIRE SKIES

By: 

By: _____

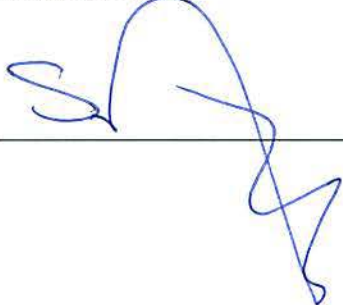
DATED this _____ day of December, ²⁰¹²~~2011~~.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

SAPPHIRE SKIES

By: _____

By: _____

A handwritten signature in blue ink, consisting of a large, stylized 'S' followed by a series of loops and a final downward stroke.

THIRD AMENDMENT TO TRUST WATER RIGHT AGREEMENT

This Third Amendment to the Trust Water Right Agreement (“Third Amendment”) is entered into by and between the State of Washington, Department of Ecology (“Ecology”) and Northland Resources, LLC, a Washington limited liability company doing business as Sapphire Skies (“Sapphire Skies”), each of which are also referred to individually as a “Party” and collectively as “Parties”, pursuant to Chapters 90.38 and 90.42 RCW.

RECITALS

A. The Parties entered into the Trust Water Right Agreement (“Agreement”) on or about May 14, 2010, a First Amendment to Trust Water Right Agreement (“First Amendment”) on or about June 2, 2010, and a Second Amendment to Trust Water Right Agreement (“Second Amendment”) on or about July 2, 2010.

B. The Agreement includes a description and process for storing water during the irrigation season for mitigation required for year round water use authorized under the new Water right permits. See the Agreement, Section B Storage. Paragraph B.3. provides: *Storage shall be released during the “winter” mitigation period for mitigation of the consumptive use of the Water rights in the winter (winter defined as October 1 to April 1). Storage shall also be available for release in August and September if necessary when the U.S. Bureau of Reclamation is releasing water (“post reservoir control”) and Mitigation Credits are not available.*

C. In Attachment B to the Agreement, as amended in the First Amendment to the Agreement, the pending applications for new Water Rights and Water Budget Neutral (WBN) projects are listed. Ecology has now:

1. Incorporated WBN projects for Cooper Pass, LLC (Ponderosa Pines) and Northland Investments Inc. (Meadow Ridge) into Application G4-35273 (City Heights).
2. Approved all the applications for listed Water Rights except for G4-35249 (Little Creek).
3. Approved the WBN project for MC Ten, LLC (Timber Heights) with winter mitigation provided by authorizing transfer of mitigation credits under the Sapphire Skies Water Exchange for the Bureau and Ecology Exchange contract.

D. The approvals for the Water Right Applications described below provide that storage will be necessary for winter mitigation prior to the actual use of water under the Water Right, without specifying the source of the storage.

E. The Parties desire to more specifically provide the storage options for these selected Water Rights.

F. The Agreement provides that the Parties may amend the Agreement upon agreement of both Parties in writing.

AMENDMENT

In consideration of the Recitals above which are incorporated into this Third Amendment, and in consideration of mutual covenants set forth herein, the Parties agree as follows:

1. The terms of the Agreement, First Amendment, and Second Amendment remain binding on the Parties. To the extent there is any conflict between or among the Agreement, the First Amendment, the Second Amendment, and this Third Amendment, the terms of the Third Amendment shall prevail.

2. As provided in Section 4 of the Agreement, Sapphire Skies is planning to construct two mitigation storage facilities as mitigation for new Water Rights as follows:

- a. Henshaw Lake at the Flatwater development, located on the north side of the Yakima River near the City of Cle Elum. This will be a 100 acre foot reservoir for recreation and mitigation. This reservoir is authorized under the Report of Examination approving reservoir permit application No. R4-35364. *See* Report of Examination, Attachment A to this Third Amendment.
- b. The Meadow Springs pond is being constructed at the Meadow Springs development under G4-35251, in the NE1/4NW1/4 of Section 12, Township 19 North, Range 14 East Willamette Meridian. The mitigation use of the pond is for storage of water available during the irrigation season from the Sapphire Skies Water Exchange Trust Water Right CS4-02223CTCL. This pond does not meet the threshold of 10 acre feet of storage for a reservoir permit. The water will be diverted from authorized sources and stored and released for the authorized mitigation purposes under the Trust Water Right CS4-02223CTCL. *See* Meadow Springs Mitigation Pond Specifications and Drawings in Attachment B to this Third Amendment.

3. The operation and relationship of these storage facilities in regard to the current Water Rights is to allow flexibility with the timing of the developments with approved Water Rights and have any water use mitigated to be water budget neutral and not impact Total Water supply Available. As provided in Attachment B to this Third Amendment, the Meadow Springs pond will provide mitigation storage and release for the first 150 residential units developed under water right authorizations G4-35247

(Flatwater), G4-35248 (Forest Ridge), G4-35250 (Woods and Steele), G4-35251 (Meadow Springs), and G4-35273 (Meadow Ridge and Ponderosa Pines, but excluding City Heights). When additional mitigation storage under Henshaw Lake at the Flatwater development is constructed and put into operation, the Meadow Springs pond will be used for mitigation of out-of-season impacts from 150 residential units to be served under G4-35250 (Woods and Steele) and G4-35251 (Meadow Springs). At that time, mitigation storage and release for existing and future build out of the other projects listed above will then be provided by Henshaw Lake.

DATED this 29 day of MARCH, 2011.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

SAPPHIRE SKIES

By: Debra C. Schaeffer By: [Signature]

ATTACHMENT B

MEADOW SPRINGS MITIGATION POND

Sapphire Skies, LLC is constructing a mitigation storage pond to be located at the Meadow Springs development, in the NE1/4NW1/4 of Section 12, Township 19 North, Range 14 East Willamette Meridian. The mitigation use of the planned pond is for storage of water available during the irrigation season from the Sapphire Skies Water Exchange (SSWE) for subsequent release back to the Yakima River system as mitigation for out-of-season impacts of new year-round water rights for domestic uses. Consumptive use of the new water rights for domestic use and the water to be diverted and stored in the pond will be mitigated by consumptive use credits held in the SSWE, and will not impact total water supply available in the Yakima River.

Projects to be Mitigated using the Meadow Springs Pond

Initially, the pond will provide mitigation storage and release for the first 150 residential units developed under water right authorizations G4-35247 (Flatwater), G4-35248 (Forest Ridge), G4-35250 (Woods and Steele), G4-35251 (Meadow Springs), and G4-35273 (Meadow Ridge and Ponderosa Pines, but excluding City Heights). Construction of an additional mitigation storage reservoir ("Henshaw Lake") is planned at the Flatwater site located on the north side of the Yakima River near the City of Cle Elum. Once additional mitigation storage at the Flatwater development is constructed and put into operation, the Meadow Springs pond will be used for mitigation of out-of-season impacts from 150 residential units to be served under G4-35250 (Woods and Steele) and G4-35251 (Meadow Springs). At that time, mitigation storage and release for existing and future build out of the other projects listed above will then be provided by Henshaw Lake.

Mitigation storage for an additional four residential units at Meadow Springs will be provided through the Bureau of Reclamation storage and exchange contract with Ecology. Use of the storage and exchange contract for these four units will continue after construction of Henshaw Lake and will not rely on the pond at Meadow Springs.

Pond Design and Operation

The pond will be approximately 1 acre in area, with total storage of about 5.3 acre-feet. This storage is sufficient to provide out-of-season (October through April) mitigation for at least 150 residential units, based on the consumptive water use calculations in the Reports of Examination for the projects listed above. To minimize capture of groundwater or leakage of stored water the pond will be lined with either a geomembrane or bentonite liner. The design drawing is attached.

The pond will be located on property that was historically irrigated using water diverted from a spring tributary to Spex Arth Creek, which in turn flows to the Yakima River. The purpose of use of the irrigation water right (*Acquavella* Court Claim No. 02223) was changed to instream flow and water banking and is one of the water rights comprising the

SSWE. The use of the pond will not change these purposes. The source of water stored in the pond will be either from an existing well, previously approved as an additional point of withdrawal to Court Claim No. 02223, or the original spring source, previously authorized as a source for the mitigation and water banking. Water will either be piped directly from the well to the pond, or conveyed from the spring to near the pond using the historical irrigation ditch, where it will be pumped into the pond for storage.

Water for storage will be diverted to the pond each year from May to September, when mitigation credits are available in the SSWE. Stored water will be released from October through April when mitigation credits are not available in the SSWE. Water from the pond will be released to the historical irrigation ditch, which flows to Spex Arth Creek and the Yakima River. Mitigation-release quantities will be determined each year based on the number of residential units relying on the pond at Meadow Springs.

RECEIVED

MAR 15 2010

SECOND AMENDMENT TO TRUST WATER RIGHT AGREEMENT

DEPARTMENT OF ECOLOGY - CENTRAL REGIONAL OFFICE

This Second Amendment to the Trust Water Right Agreement ("Second Amendment") is entered into by and between the State of Washington, Department of Ecology ("Ecology") and Northland Resources, LLC, a Washington limited liability company doing business as Sapphire Skies ("Sapphire Skies"), each of which are also referred to individually as a "Party" and collectively as "Parties", pursuant to Chapters 90.38 and 90.42 RCW.

RECITALS

A. The Parties entered into the Trust Water Right Agreement ("Agreement") on or about May 14, 2010, and a First Amendment To Trust Water Right Agreement ("First Amendment") on or about June 2, 2010.

B. The Agreement includes a list and description of applications for permits and requests for water budget neutral projects, collectively referred to as applications. See Attachment B to the Agreement, as amended in the First Amendment.

C. The Parties desire to more specifically provide for the process and elements of the requests for water budget neutral projects.

E. The Agreement provides that the Parties may amend the Agreement upon agreement of both Parties in writing.

AMENDMENT

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

1. Except as provided herein, the terms of the Agreement and First Amendment remain binding on the Parties. To the extent there is any conflict between the Agreement, the First Amendment and this Second Amendment, the terms of the Amendment shall prevail.

2. The determinations for the water budget neutral projects will be based on a maximum standard of 350 gallons per day ("gpd") per connection for indoor water use¹; provided that if Ecology issues such determinations, this allocation of 350 gpd can be reduced and the commitment of mitigation credits in the Sapphire Skies Water Exchange can be credited back to Sapphire Skies based upon the following:

¹ The 350 gpd per connection represents an allocation of 70 or 105 gpd per connection consumptive water use based on the 20% consumptive use for a sanitary sewer system and 30% consumptive use for residential septic system, respectively, under WAC 173-539A-050(3).

- a. Ecology determines in rule or policy a standard other than the 350 gpd/connection for calculating the average indoor water use applicable to single-family residences, and Sapphire Skies elects to use this new standard for water budget neutral projects that Ecology had prior to the new standard determined to be water budget neutral.
- b. Sapphire Skies provides Ecology with three years of monitoring data of indoor water use for the purpose of showing that the actual average indoor water use is less than a 350 average gpd for each of the recording periods specified in WAC 173-539A-070(3). If Sapphire Skies collects and submits water use data then the three years of monitoring shall commence when the first residential unit is occupied in any one of the water budget neutral projects listed in Attachment B, as may be amended in the future, for which a water budget neutral determination has been issued by Ecology. A water use monitoring plan shall be developed by Sapphire Skies and submitted to Ecology for approval prior to commencement of the monitoring program.

3. Any new standard adopted under Paragraph 2.a above shall not apply retroactively to water budget neutral projects that Ecology has already determined to be water budget neutral unless Sapphire Skies chooses to apply that new standard. Otherwise, for all projects not under Paragraph 2.a above, the indoor water use shall be the actual average gallons per day used based on the monitoring data as defined in 2.b above, subject to Ecology approval. For projects already determined to be water budget neutral prior to any new standard under 2.a. above, if Sapphire Skies selects the new standard under 2.a. above, or Ecology approves the monitoring data submitted by Sapphire Skies under 2.b. above, the mitigation credits from the instream flow water rights recognized in the Sapphire Skies Water Exchange for these water budget neutral projects will be credited back to Sapphire Skies Water Exchange based on the difference between the consumptive use of indoor water use calculated at 105 gpd/connection and the consumptive water use calculated at either the new Ecology standard or the monitoring and data collection.

DATED this 2nd day of July, 2010.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

SAPPHIRE SKIES

By: Mark C. Schuyler

By: [Signature]

RECEIVED
JUN 10 2010
DEPARTMENT OF ECOLOGY - CENTRAL REGIONAL OFFICE

FIRST AMENDMENT TO TRUST WATER RIGHT AGREEMENT

This First Amendment to the Trust Water Right Agreement ("Amendment") is entered into by and between the State of Washington, Department of Ecology ("Ecology") and Northland Resources, LLC, a Washington limited liability company doing business as Sapphire Skies ("Sapphire Skies"), each of which are also referred to individually as a "Party" and collectively as "Parties", pursuant to Chapters 90.38 and 90.42 RCW.

RECITALS

- A. The Parties entered into the Trust Water Right Agreement ("Agreement") on or about May 14, 2010.
- B. The Agreement includes a list and description of applications for permits and requests for water budget neutral projects, collectively referred to as applications. *See Attachment B to the Agreement.*
- C. Sapphire Skies desires to revise the list of allocations.
- D. The Parties desire to more specifically provide for the process and elements of the requests for water budget neutral projects.
- E. The Agreement provides that the Parties may amend the Agreement upon agreement of both Parties in writing.

AMENDMENT

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

- 1. Except as provided herein, the terms of the Agreement remain binding on the Parties. To the extent there is any conflict between the Agreement and this Amendment, the terms of the Amendment shall prevail.
- 2. Attachment B is amended by removing the following requests for the water budget neutral projects:
 - a. Back Country Resources, LLC (for Evergreen Park development), which is now part of Woods and Steele development under application no. G4-35250.
 - b. Misty Mountain LLC (for Tillman Heights development), which is now part of Fircrest development under application no. G4-35246.

c. Stuart Vista, LLC (for the Tillman 19 development), which is now part of Fircrest development under application no. G4-35246.

3. Ecology will make determinations on requests for water budget neutral projects only after making the following findings as provided under the emergency rule, chapter 173-539A WAC:

a. Each request complies with the definition of "Group use".

b. Water Rights must be identified that would be placed into the trust water right program to offset the consumptive use associated with the water budget neutral projects and serve as mitigation for impacts to "total water supply available" ("TWSA").

c. The Water Rights as listed in Attachment A have been approved for change to instream flow and water banking and have been identified as water rights for the trust program to offset consumptive use for impacts to TWSA from new water rights.

4. Determinations for water budget neutral projects will be issued but shall be only effective upon satisfaction of the following requirements:

a. The identified water rights as provided in Paragraph 3.b are final decisions no longer subject to appeal.

b. The Agreement is final no longer subject to appeal.

c. The appropriate amount of the identified water right is conveyed to the state by deed and Ecology issues a Trust Water Right Certificate. See Paragraphs A.2.c. and A.2.d of the Agreement.

d. Notices required under RCW 90.42 will have been completed.

e. The storage of water for non-irrigation season mitigation shall be completed in a reasonable period of time ^{ARC (S)} ~~approved~~ by Ecology, and shall be completed prior to actual use of water under the determination. See Paragraphs B.2 and B.3 of the Agreement.

f. Nothing herein forecloses or limits Ecology to place additional conditions necessary to comply with the emergency rule.

5. The Parties shall establish an escrow that shall be opened upon the mutual execution of this Amendment and its deposit in the escrow with the determinations as provided in Paragraph 4. The escrow shall close in regard to each determination when the stated requirements in the respective determination are fully satisfied, and thereafter

the determination shall be released from escrow. Upon closing, the escrow agent shall record the deed and the Trust Water Right Certificate with the Kittitas County Auditor.

6. All other terms and conditions in the Agreement remain in full force and effect.

DATED this 2nd day of June, 2010.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

SAPPHIRE SKIES

By: Mark C. Shuffel By: [Signature]

AMENDED ATTACHMENT B

*[List of water right applications and requests for determination
of water budget neutrality submitted to Department of Ecology]*

Applications for eight (8) new ground water rights:

Applicant: Misty Mountain LLC
Project Name: Fircrest
No. G4-35246
Description: Appropriation of water from a well or wells in the amount of 250 gallons per minute each year, 11 acre-feet per year for the purpose of continuous multiple domestic supply of a 27-unit residential development. The source of the proposed appropriation is located within the SE $\frac{1}{4}$ NW $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 9, T. 19 N., R. 15 E.W.M., Kittitas County, Washington.

Applicant: Green Canyon LLC
Project Name: Flatwater
No. G4-35247
Description: Appropriation of water from a well or wells in the amount of 250 gallons per minute each year, 11 acre-feet per year for the purpose of continuous multiple domestic supply of an 26-unit residential development. The source of the proposed appropriation is located within the SW $\frac{1}{4}$ of Section 30, T. 20 N., R. 16 E.W.M., Kittitas County, Washington.

Applicant: Iron Snowshoe, LLC
Project Name: Forest Ridge
No. G4-35248
Description: Appropriation from a well or wells in the amount of 250 gallons per minute, 75 acre-feet per year for the purpose of continuous multiple domestic supply of a 190-unit residential development. The source of the proposed appropriation is located within the N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, and SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 24, T. 20 N., R. 15 E.W.M. and the SW $\frac{1}{4}$ of Section 30, T. 20 N., R. 16 E.W.M., Kittitas County, Washington.

Applicant: Cool Water LLC, Fortune Creek LLC, and Saddle Ridge LLC
Project Name: Little Creek
No. G4-35249

Description: Appropriation from a well or wells in the amount of 250 gallons per minute each year, 20 acre-feet per year for the purpose of continuous multiple domestic supply of a 50-unit residential development. The source of the proposed appropriation is located within the N $\frac{1}{2}$ and the N $\frac{1}{2}$ N $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 33, T. 20 N., R. 14 E.W.M., Kittitas County, Washington.

Applicant: Cool Water LLC and Fortune Creek LLC
Project Name: Woods and Steele
No. G4-35250
Description: Appropriation from a well or wells in the amount of 250 gallons per minute, 26 acre-feet per year, for the purpose of continuous multiple domestic supply of a 65-unit residential development. The source of the proposed appropriation is located within the SW $\frac{1}{4}$ of Section 7, T. 19 N., R. 15 E.W.M., Kittitas County, Washington.

Applicant: Meadow Springs LLC and Stuart Vista LLC
Project Name: Meadow Springs
No. G4-35251
Description: Appropriation from a well or wells in the amount of 250 gallons per minute each year, 53 acre-feet per year, for the purpose of continuous multiple domestic supply of a 135-unit residential development. The source of the proposed appropriation is located within the E $\frac{1}{2}$ of Section 1; AND the S $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 1; AND the NE $\frac{1}{4}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 12; ALL in T. 19 N., R. 14 E.W.M., Kittitas County, Washington.

Applicant: Green Canyon LLC, Cooper Pass LLC, and Highmark Resources LLC
Project Name: City Heights
No. G4-35273
Description: Appropriation from a well or wells in the amount of 1,200 gallons per minute each year, 269 acre-feet per year for the purpose of continuous multiple domestic supply of a 875-unit residential development. The sources of the proposed appropriation are located within the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 24, the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 24, the SE $\frac{1}{4}$ of Section 25, the NW $\frac{1}{4}$ of Section 25, the N $\frac{1}{2}$ of Section 26, the N $\frac{1}{2}$ of Section 27, the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 27, the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 27, and the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 30, all in T. 20 N., R. 15 E.W.M., and the SW $\frac{1}{4}$ of Section 30, in T. 20 N., R. 16 E.W.M., Kittitas County, Washington.

Three (3) requests for determination of water budget neutrality:

Applicant: MC Ten, LLC
Project Name: Timber Heights
Quantities: Annual – 4.0 afy
Consumptive – 2.4 afy

Applicant: Cooper Pass, LLC
Project Name: Ponderosa Pines
Quantities: Annual – 4.0 afy
Consumptive – 2.4 afy

Applicant: Northland Investments, Inc.
Project Name: Meadow Ridge
Quantities: Annual – 4.7 afy
Consumptive – 2.8 afy

TRUST WATER RIGHT AGREEMENT

This Trust Water Agreement (“Agreement”) is entered into by and between the State of Washington, Department of Ecology (“Ecology”) and Northland Resources, LLC a Washington limited liability company doing business as Sapphire Skies (“Sapphire Skies”), each of which are also referred to individually as a “Party” and collectively as “Parties”, pursuant to Chapters 90.38 and 90.42 RCW.

RECITALS

A. Sapphire Skies manages several LLCs, which collectively are referred to as “Sapphire Skies” for the purposes of this Agreement. Sapphire Skies desires to create the “Sapphire Skies Water Exchange” (“the Exchange”) by utilizing the State Trust Water Right Program (“TWRP”) to change existing water rights that divert water from the Yakima River and its tributaries and have a priority date prior to 1905 to instream flow and water banking. The Exchange will be defined as a bank of “Mitigation Credits” that will be determined by Ecology based on the consumptive quantities in acre feet of the water rights changed through the TWRP.

B. Sapphire Skies has filed applications to change existing water rights to instream flow and water banking for the Exchange, and may apply to change additional water rights in the future to be placed into the Exchange. These applications and approvals are listed and described in Attachment A, which list may from time to time be amended with the consent of both Parties if and when additional applications are filed and approvals granted.

C. The Exchange shall be available to offset impacts to senior water rights and to comply with the rules and regulations of Ecology, including the protection of Total Water Supply Available (“TWSA”) under chapter 173-539A WAC for out-of-priority water right permits and for requests for water budget neutral permit exempt ground water rights for domestic projects (“Water Rights”).

D. Sapphire Skies has filed applications and requests with Ecology for Water Rights, which are listed and described in Attachment B, that may from time to time be amended with the consent of both Parties if and when additional applications are filed and any approvals granted.

E. Sapphire Skies desires to have the water rights that are approved by Ecology for change for instream flows and water banking purposes and placed into the Exchange (“Instream Flow Rights”) to become effective as State Trust Water Rights and owned by the State at such time and for such quantity that water applied to actual beneficial use under the Water Rights. It is intended that a process be implemented for the Instream Flow Rights to become effective as State Trust Water Rights. In this process, Sapphire Skies will on a semi-annual basis notify Ecology in writing as to the quantity of water that will be applied to actual beneficial use under the Water Rights within six to twelve months of providing the notification, and with such notification include the necessary documentation conveying the said Instream Flow Right, or portion thereof, to the State. Until the Instream Flow Rights or portion thereof become effective as a Trust Water Right, Sapphire Skies shall own and control the Instream Flow Rights and will

have the ability to assign and lease the Mitigation Credits as well as withdraw the Instream Flow Rights from the Exchange.

F. Sapphire Skies and Ecology desire to memorialize the Exchange and provide for management and placement of the Mitigation Credits in the Exchange as necessary to mitigate for the Water Rights, and to provide Ecology the authority to assign some or all of the total quantity of the Mitigation Credits to the Water Rights.

AGREEMENT

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

A. Conveyance

1. Applications have been filed to change the following water rights, that are more fully described in Attachment A, to instream flow and water banking through the TWRP for the Exchange, subject to the terms of this Agreement. At such time that these water right applications are approved but prior to the rights becoming effective as State Trust Water Rights, they will be used for instream flow purposes and referred to as Instream Flow Rights:

a. Meadow Springs, LLC, the Pasco water right, *Acquavella* Court Claim No. 02223; Water Right Claim No. 118160, as changed, Application No. CS4-02223CTCL (KITT-05-05).

b. Green Canyon LLC, the Newton water right, *Acquavella* Court Claim No. 02222, Water right Claim No. 01676. *See specific allocation and availability of the Newton water as Exhibit 3 to Attachment A.*

c. Green Canyon LLC, the Henshaw water right, *Acquavella* Court Claim No. 00365.

The Newton water right is under contract for purchase by Green Canyon LLC, and Newton has also signed the application. The Henshaw water right is under contract for purchase by Green Canyon LLC, and Henshaw has also signed the application.

2. Conditions of Conveyance

a. Ecology has determined the Mitigation Credits represented by consumptive use of the Instream Flow Rights for the Exchange as listed in paragraph A.1 above. Ecology will determine the Mitigation Credits represented by consumptive use of additional water rights, other than those in A.1. above, that may be approved by Ecology for instream flow purposes, which shall be listed and described in Attachment A as revised.

b. Sapphire Skies shall select in priority those Water Rights that will seek Mitigation Credits from the Sapphire Skies Water Exchange.

c. The Instream Flow Rights identified in paragraph A.1 above, and listed in Attachment A are intended to provide Mitigation Credits for both in-time mitigation during the "summer" mitigation period, a/k/a irrigation season, and a "winter" mitigation period as provided in paragraph B.3 below. At such time that Ecology approves an application for a Water Right, it shall quantify the necessary mitigation and Mitigation Credits, considering the consumptive impacts of each approved Water Right, and taking into consideration the consumptive use of the septic water systems and municipal treatment systems which are at a minimum those as set forth in chapter 173-539A WAC.

d. The Instream Flow Rights will not be effective as State Trust Water Rights and owned by the State until such time and only in such quantities that serve as Mitigation Credits for actual use of water by a project authorized under the Water Right approved for said project.

e. To implement the term 2(d) above, on or before July 31st and December 31st of each year, Sapphire Skies shall notify Ecology in writing of the quantities of water to be applied to actual beneficial use under specific Water Rights within the following six to 12 months. The notification shall designate the Instream Flow Right to be used for the mitigation, and include a statement of conveyance or deed of the Instream Flow Right, or portion thereof, to the State for the quantity of water that will be applied to actual use within the stated period of time. Ecology will issue a Trust Water Right for the quantity of water that is provided in the notices.

f. Until the Instream Flow Rights or portion thereof, are conveyed by the notice requirement in term 2.e. above, Sapphire Skies shall retain ownership and control of the Instream Flow Rights including: (1) the right to request that Ecology withdraw the approval of the Instream Flow Right and the water, less any portion already conveyed under term 2.e. above, to allow the water right to be used for the original use under the water right, or for other purposes as may be approved by Ecology, and (2) the right to assign the Mitigation Credits that Ecology approves as available in the Exchange for other purposes.

g. The commencement of construction of residences under a Water Right shall not be authorized, and Sapphire Skies shall not initiate commencement of construction of residences under a Water Right until such time that the Mitigation Credits under the Instream Flow Rights are available in the Exchange as mitigation for the full Water Right authorized for the project.

h. If an authorized quantity in a Water Right is not fully applied to actual use for any reason at the time of completion of the project, the remaining available Mitigation Credits under the Instream Flow Rights committed to the

Water Right under term 2.g above shall be available for assignment and lease for other uses to be proposed by Sapphire Skies, as provided in paragraph A.2.d above subject to Ecology approval as may be required under law.

i. In regard to New Water Right application for the City Heights Project application number G4-35273, Ecology recognizes that this application or any permit issued from said application may be assigned in whole or in phases to the City of Cle Elum, should the City approve the City Heights project under the City's jurisdiction. The assignment to the City of Cle Elum will be based on a water supply agreement Sapphire Skies will execute for water delivery from the City's water system. Sapphire Skies may assign incremental portions of the City Heights water right to the City for the development phases.

j. Until the Instream Flow Rights are effective as Trust Water Rights as provided in paragraphs 2.d and 2.e above, the Instream Flow Rights shall remain in the Exchange for instream and water banking purpose, except as provided in paragraphs 2.f. and 2.h.

k. Nothing in this Agreement forecloses Sapphire Skies from either assigning and transferring Mitigation Credits to other parties as mitigation for new water rights, or requesting Ecology to assign and commit Mitigation Credits to "exempt permit" ground water uses, including water budget neutral projects under chapter 173-539A WAC.

l. The Exchange shall be maintained and available for the transfer through the TWRP of additional water rights not otherwise referenced herein. Sapphire Skies, in its sole discretion and as it determines necessary for mitigation of any other new water rights, may apply for a change of purpose of use through the application process followed for the Pasco, Henshaw, and Newton Trust Water Rights as provided herein.

B. Storage

1. Sapphire Skies shall provide necessary mitigation for Water Rights year round including, as necessary, storing water during the irrigation season or other acceptable means that shall be mitigated with the Mitigation Credits.

2. Ecology shall determine the winter mitigation and potential storage quantity for each Water Right at such time the Water Right is approved. Ecology shall provide a reasonable diligence schedule in each Water Right to obtain approvals and construct necessary storage prior to actual use of water under the Water Right.

3. Storage shall be released as necessary during the "winter" mitigation period for mitigation of the consumptive use of the Water Rights in the winter (winter is defined as October 1 to April 1). Storage shall also be available

for release in August and September if necessary when the U.S. Bureau of Reclamation is releasing water ("post reservoir control") and Mitigation Credits are not available.

C. Acceptance

1. Upon approval of the applications to change the water rights identified in paragraph A.1 and Attachment A, the Instream Flow Rights and corresponding Mitigation Credits will be accepted by Ecology for the creation of the Sapphire Skies Water Exchange, and Ecology agrees to administer that portion of the Mitigation Credits necessary for approved Water Rights subject to the terms of this Agreement.

2. As provided in paragraph A.2.a above, Ecology shall determine the Mitigation Credits available under each Instream Flow Right that is now and in the future conveyed to the Exchange. Ecology has now determined the Mitigation Credits provided by the Pasco, Newton, and Henshaw Trust Water Rights. See Attachment A.

D. Amendments

The parties may amend this agreement upon written agreement signed by the parties.

E. Notice Provisions

All notices required pursuant to this Agreement shall be sent or hand delivered to the following, with evidence of delivery provided:

To Sapphire Skies:

Sapphire Skies
Attn: David Blanchard
206 W. 1st St.
Cle Elum, WA 98922

With a copy to:

Tom McDonald
Cascadia Law Group PLLC
606 Columbia Street NW, Suite 212
Olympia, WA 98501

To Ecology:

Department of Ecology
Attn: Mark C. Schuppe
15 W. Yakima Ave., Suite 200
Yakima, WA 98902-3452

DATED this 13 day of May, 2010.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

SAPPHIRE SKIES RESOURCES

By: Mark C. Schuyler

By:

By: _____

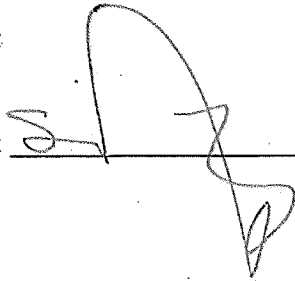
DATED this 13 day of MAY, 2010.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

By: _____

SAPPHIRE SKIES

By:

By:  _____

ATTACHMENT A

[List of applications to change existing water rights to Instream Flow Rights]

Meadow Springs, LLC, the Pasco water right, *Acquavella* Court Claim No. 02223; Water Right Claim No. 118160, as changed, Application No. CS4-02223CTCL (KITT-05-05).

See attached Exhibit 1, Report of Examination dated April 19, 2010.

Green Canyon, LLC, the Henshaw water right, *Acquavella* Court Claim No. 00365.

See attached Exhibit 2, undated draft Report of Examination.

Green Canyon, LLC, the Newton water right, *Acquavella* Court Claim No. 02222, Water Right Claim No. 01676.

See attached Exhibit 3, Report of Examination dated May 14, 2016 and specific allocation and availability of the Newton water right in attached Newton Trust Water Right Conditions.

ATTACHMENT A – EXHIBIT 1

**MEADOW SPRINGS, LLC (PASCO WATER RIGHT)
REPORT OF EXAMINATION DATED APRIL 19, 2010**



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

**TRUST WATER RIGHT
REPORT OF EXAMINATION**
Change of Purpose of Use to Instream Flow and Water Banking
WRTS File No.: CS4-02223CTCLsb2@1

PRIORITY DATE	CLAIM NO.	PERMIT NO.	CERTIFICATE NO.
July 31, 1903	CS4-02223CTCL	N/A	N/A.

NAME OF PARTY CONVEYING RIGHT TO TRUST WATER RIGHTS PROGRAM		
Meadow Springs, L.L.C.		
ADDRESS/STREET	CITY/STATE	ZIP CODE
206 West First Street	Cle Elum, WA	98922

TRUST WATER RIGHT ATTRIBUTES

SOURCE		
Unnamed Spring ¹		
TRIBUTARY OF (IF SURFACE WATERS)		
Spex Arth Creek and the Yakima River		
MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
1.01		101

QUANTITY, TYPE OF USE, PERIOD OF USE

0.99 cubic feet per second, 99 acre feet per year for the purpose of instream flow and water banking from April 15 through September 30.

0.02 cubic feet per second; 2 acre-feet per year for the purpose of instream flow and water banking year round.

Instream Flow in Secondary Reach

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Avg. Qi (cfs)	0.0*	0.0*	0.0*	0.0*	0.07	0.19	0.26	0.23	0.15	0.0*	0.0*	0.0*	---
Qa (ac-ft)	0.01	0.01	0.01	0.09	4.18	11.5	15.9	14.0	9.22	0.01	0.01	0.01	55.0

*Approximately 0.0002 cubic feet per second.

HISTORIC POINT OF DIVERSION OR WITHDRAWAL

APPROXIMATE LOCATION OF HISTORIC DIVERSION / WITHDRAWAL

800 feet north and 100 feet west from the southeast corner of Section 2, T. 19 N., R. 14 E.W.M.

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE E.W.M.	WRIA	COUNTY
SE ¹ / ₄ SE ¹ / ₄	2	19 N.	14 E.W.M.	39	Kititas
PARCEL NUMBER	LATITUDE	LONGITUDE		DATUM	
18199	47.164	-121.049		NAD 27	

AFFECTED REACHES – DESCRIPTION OF PLACE OF USE
[See Attachment 1 for map of the trust water right location]

PLACE OF USE: Unnamed Stream, Spex Arth Creek, and the Yakima River.

Primary Reach: Begins at a point approximately 800 feet north and 100 feet west from the southeast corner of Section 2, T. 19 N., R. 14 E.W.M.

Secondary Reach: Begins at a point on an Unnamed Stream approximately 2,390 feet west and 250 feet south of the NE¹/₄ of Section 12, T. 19 N., R. 14 E.W.M., and ends at the confluence of the Yakima River and the Columbia River.

TRUST WATER RIGHT TERM	
BEGIN DATE	END DATE
Permanent	N/A

PROVISIONS

Provisions related to the Trust Water Right:

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times wells or diversions and associated distribution systems for compliance with water law.

Northland Resources, Inc. is responsible for the following provision: Northland shall measure and record the discharge of the unnamed spring noted in Acquavella Court Claim 02223, for the purpose of demonstrating that said unnamed spring provides flow in quantities that equal or exceed the monthly instantaneous quantities necessary to satisfy the purposes identified in this Change Authorization. For the purposes of this provision, 'monthly instantaneous quantities necessary to satisfy the purposes identified in this change authorization' are as follows:

Month	April	May	June	July	August	September
Avg. Qi (cubic feet per second)	0.003	0.130	0.375	0.501	0.441	0.299

The study shall consist of: Measuring and recording flow from the unnamed spring noted in Acquavella Court Claim 02223 for an irrigation season. An approved measuring device shall be installed and maintained for the said source in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173. The measuring device and installation shall be approved by the Department of Ecology prior to recording. Flow data shall be recorded once a month during the irrigation season (April 15 through September 30). Flow measurements shall be recorded at least 14 days apart. Flow data shall be made available to the Department of Ecology upon request. Upon completion of the study, the Department of Ecology shall review the results and determine the extent to which this Trust Water Right may serve as mitigation in a water bank for purposes of offsetting new uses. In the event that direct measurements show that discharge from the spring equals or exceeds the instantaneous quantity noted above, continued monitoring of spring discharge will not be required. In the event that direct measurements do not show that discharge from the spring equals or exceeds the instantaneous quantity noted above, Northland Resources shall perform this measurement and recording study the following irrigation season.

All of the cultivated land irrigated under Acquavella Court Claim No. 02223 (approximately 34 acres) must remain fallow. In this case, fallowing means to leave unseeded, unplowed, uncultivated, or for the purpose of growing or harvesting a crop. If the subject land is not left fallow, this trust water right cannot be protected and will fail to serve as mitigation for new uses.

Future stock water or domestic use under this Change Authorization No. CS4-02223CTCL or Acquavella Court Claim No. 02223 is not authorized.

FINDINGS OF FACT AND ORDER

Upon reviewing the investigator's report, I find all facts relevant and material to the subject application have been thoroughly investigated. Furthermore, I find the change of water right as recommended will not be detrimental to existing rights or detrimental to the public interest.

Therefore, I ORDER the requested change of place and purpose of use under Trust Water Right Application No. CS4 02223CTCLsb2@1, be approved subject to existing rights and the provisions specified above.

This decision may be appealed pursuant to RCW 34.05.514(3), RCW 90.03.210(2), and Pretrial Order No. 12 entered in *State of Washington, Department of Ecology v. James Acquavella, et al.*, Yakima County Superior Court No. 77-2-01484-5 (the general adjudication of surface water rights in the Yakima River Basin). The person to whom this decision is issued, if he or she wishes to file an appeal, must file the Notice of Appeal with the Yakima County Superior Court within thirty (30) days of receipt of this decision. Appeals must be filed with the Superior Court Clerk's Office, Yakima County Superior Court, 128 North 2nd Street, Yakima, WA 98901, RE: Yakima River Adjudication. Appeals must be served in accordance with Pretrial Order No. 12, Section III ("Appeals Procedures"). The content of the Notice of Appeal must conform to RCW 34.05.546. Specifically, the Notice of Appeal must include:

The name and mailing address of the appellant;
Name and address of the appellant's attorney, if any;
The name and address of the Department of Ecology;
The specific application number of the decision being appealed;
A copy of the decision;
A brief explanation of Ecology's decision;
Identification of persons who were parties in any adjudicative proceedings that led to Ecology's decision;
Facts that demonstrate the appellant is entitled to obtain judicial review;
The appellant's reasons for believing that relief should be granted; and
A request for relief, specifying the type and extent of relief requested.


The "parties of record" who must be served with copies of the Notice of Appeal under RCW 34.05.542(3) are limited to the applicant of the decision subject to appeal, Ecology and the Office of the Attorney General.

All others receiving notice of this decision, who wish to file an appeal, must file the appeal with the Yakima County Superior Court within thirty (30) days of the date the Order was mailed. The appeal must be filed in the same manner as described above.

You have a right to appeal this ORDER. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the "date of receipt" of this document. Filing means actual receipt by the Board during regular office hours
- Serve your appeal on the Department of Ecology within 30 days of the "date of receipt" of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). "Date of receipt" is defined at RCW 43.21B.001(2).

Signed at Yakima, Washington, this 19th day of April 2010.



Mark Schuppe, Section Manager
Water Resources Program
Central Region Office

BACKGROUND

Description and Purpose of Proposed Change

A declaration from Emil Pasco (Court Claim No. 02223 of the Acquavella Adjudication) was confirmed a right for 0.98 cubic feet per second (cfs) and 98 acre-feet per year (ac-ft/yr) from an unnamed spring for the irrigation of 49 acres, 0.02 cfs and 2 ac-ft/yr for domestic supply, and 0.01 cfs and 1.0 ac-ft/yr for stock water pursuant to the Conditional Final Order issued by Yakima Superior Court on February 13, 1997.

On May 17, 2005, Scatter Creek Resources, L.L.C., under the control of Northland Resources, Inc., submitted an Application for Change with the Kittitas County Conservancy Board (the Board) to change Court Claim No. 02223. The Department of Ecology (Ecology) assigned the Change Application an identifying number of CS4-02223CTCL. The applicant proposed to change the purpose of use, place of use, period of use, and point of diversion of Court Claim No. 02223. The Board conditionally approved the change on January 5, 2006. Ecology modified the Board's decision on March 24, 2006. Ecology affirmed the Board's tentative determination of 98 acre-feet for irrigation and 101 acre-feet total. However, Ecology's modification reduced the Board's tentative determination of irrigation to 34 acres. Ecology added a provision to the Board's decision including; "Consumptive use under this water right shall not exceed 55 acre-feet." Ecology further limited the season of use to "April 15 to September 30 until a Mitigation Plan for out-of-season impact has been approved by Ecology, the Bureau of Reclamation, and the Department of Health". The Board's Record of Decision and Ecology's modification were given much weight during the consideration of the current Application for Change No. CS4-02223CTCLsb2@1.

On July 16, 2009, Dave Blanchard of Northland Resources, Inc., and Meadow Springs, L.L.C. applied to place Change Authorization No. CS4-02223CTCL into the State Trust Water Right Program. The application was assigned the identifying number CS4-02223CTCLsb2@1. This application along with four other Trust Water Right Applications (Nos. CS4-01676(B)CTCL@1, CS4-00365CTCLsb5, CS4-01296CTCLsb5@1(A), CS4-01296CTCLsb5@1(B)) were submitted by Northland Resources, Inc. and associated L.L.C.'s for the purposes of water banking in order to offset the consumptive use associated with new groundwater use proposals.

Attributes of Water Right Change Authorization No. CS4-02223CTCL and Proposed Change

Table 1
Summary of Existing Attributes and Proposed Changes to
Water Right Change Authorization No. CS4-02223CTCL

Attributes	Documented	Proposed
Name	Meadow Springs L.L.C.	N/A
Priority Date Date of Application for Change	Priority Date – July 31, 1903	Application Date – July 16, 2009
Instantaneous Quantity	1.01 cfs	1.01 cfs In Trust
Annual Quantity	101 ac-ft/yr	101 ac-ft/yr In Trust
Source ¹	Well	In Trust
Point of Withdrawal	Approximately 2,240 feet east and 1,025 feet south of the NW¼ of Section 12 T. 19 N., R. 14 E.W.M.	In Trust
Purpose of Use	Municipal Supply	In Trust

¹ The source approved under Change Authorization No. CS4-02223CTCL has not been used, therefore, the source and location confirmed under Acquavella Court Claim 02223 will be the basis of this Trust Water Right.

Period of Use	April 15 through September 30	In Trust
Place of Use	<p>S½SW¼ of Section 1, T. 19 N., R. 14 E.W.M. EXCEPT: Right-of-way for Pasco County Road, being described as that portion conveyed to Kittitas County for Pasco Road cul-de-sac by deed recorded September 26, 1994, in Volume 358, Page 1993, under Auditor's File No. 575350, and amended by deed recorded January 9, 1997, under Auditor's File No. 199701090017; and parcels Nos. 19-14-12000- 0003, 19-14-0100-0005, 19-14-0100-0006, 19-14- 12000-0016 within Section 12; and the E½SE¼ of Section 1, (parcel No. 19-14-01054-0003), ALL within T. 19 N., R. 14 E.W.M.</p>	In Trust.— See page 1 for POU description

Legal Requirements for Proposed Change

The following is a list of requirements that must be met prior to authorizing the proposed change in CS4-01676(B)CTCL.

- **Public Notice**
Notice was published by the applicant in *The Daily Record* of Ellensburg for two consecutive weeks, commencing on October 24, 2009, and October 31, 2009.
- **State Environmental Policy Act (SEPA)**
On October 30, 2009, Kittitas County (SEPA lead agency) issued a Mitigated Determination of Non-Significance for the Meadow Springs (LP-07-00015), Starlite Heights (LP-07-00016), and Tamarack Ridge (LP-07-00018) Performance Based Cluster Plats. This decision was made after review of a completed environmental checklist and other information on file with the lead agency. Kittitas County determined that certain mitigation measures or conditions were necessary in order issue a Determination of Non-Significance. Those conditions related to: cultural resources and historic preservation, stormwater, transportation, lights and aesthetics, wetlands and wildlife, and noise. No appeals were filed in protest of this decision.
- **Water Resources Statutes and Case Law**
 - RCW 90.03.380(5)(b) states that applications relating to existing surface or ground water rights may be processed and decisions on them rendered independently of processing and rendering decisions on pending applications for new water rights within the same source of supply without regard to the date of filing of the pending applications for new water rights.
 - RCW 90.38.040(1) states that all trust water rights acquired by the department shall be placed in the Yakima River Basin trust water rights program to be managed by the department. The department shall issue a water right certificate in the name of the state of Washington for each trust water right it acquires.
 - RCW 90.42.100(1) states that the department is authorized to use the trust water rights program in the Yakima River basin for water banking purposes.
 - RCW 90.42.100(2)(a) states that water banking may be used to mitigate for any beneficial use under chapter 90.03, 90.44, or 90.54 RCW, consistent with any terms and conditions established by the transferor, except that return flows from water rights authorized in whole or in part for any purpose shall remain available as part of the Yakima basin's total water supply available and to satisfy existing rights for other downstream uses and users.
 - RCW 90.42.100(2)(b) states that water banking may be used to transfer water rights to and from the trust water rights program.

INVESTIGATION

The water right change investigation was conducted by Kurt Walker, an Ecology Permit Writer. A site investigation was conducted on September 8, 2009, and was attended by Joseph Morrice of Aspect Consulting. Additional information regarding the use of water was obtained through:

- Ecology Records including documents from Change Application No. CS4-02223CTCL.
- Documentation submitted by the applicant, their consultants (Aspect Consulting and Washington Rivers Conservancy), and their attorney (Tom McDonald) including:
 - Project overview Memorandum by Aspect Consulting dated June 1, 2009.

- Technical Memorandum regarding Evapotranspiration by Aspect Consulting dated July 29, 2009.
- Conversations with:
 - Joseph Morrice.
 - Timothy Flynn.
 - Lisa Pelly.
- Review of digitized topographic maps and aerial photographs.
- Yakima County Superior Court *Reports of Referee* on the Yakima River Basin Water Rights Adjudication for Subbasin No. 2 (Easton).

History of Water Use

Court Claim No. 02223 from the Acquavella Adjudication is appurtenant to the Meadow Springs, L.L.C. land. The unnamed spring noted in Court Claim No. 02223 has been used for irrigation, domestic supply, and stock water. The *Report of Referee* for Subbasin No. 2 notes that at the time of the evidentiary hearing, approximately 49 acres of hay and pasture were being flood irrigated from an unnamed spring and up to 25 head of cattle were being raised on the property.

See Background section above for Court Awards.

The spring does not appear to have a distinct point from which water is expressed, but rather a broad area of discharge or seepage. Seepage is controlled and managed for irrigation by means of a series of open ditches which distribute water easterly along the southern boundary of the cultivated land. To irrigate the land, the ditches are temporarily dammed causing sheet flow across the field. Limited furrowing is utilized to regulate the application of water once a ditch overflows. The terrain of the irrigated ground is characterized by irregular to flat topography which slopes general to the north and northeast. As a result, the irrigation efficiency is very low (approximately 50%), but within the range typical of flood irrigation.

While cattle have always been allowed to drink freely from open ditches, the method of domestic supply delivery under this right has changed over time. Initially, water used for domestic purposes was hauled by hand because gravity flow delivery was not possible. Sometime after the Pasco family purchased the property, a pump house was built and a pump installed to deliver water from the spring directly to the house as it is today.

On May 17, 2005, Scatter Creek Resources, L.L.C., under the control of Northland Resources, Inc., submitted an Application for Change (CS4-02223CTCL) with the Kittitas County Conservancy Board (Board) to change the purpose of use, place of use, period of use, and point of diversion of Court Claim No. 02223. The Board conditionally approved the change on January 5, 2006 and Ecology modified the Board's decision on March 24, 2006. See Background section above for water right attributes and limitations associated with Change Authorization No. CS4-02223CTCL.

See Attached Map (Attachment I) for POU and POW locations

To this day, water has not been used from the new point of withdrawal or for municipal purposes to which it was changed. However, it appears that water has been used from the historic point of diversion for irrigation. Because no additional information was presented regarding the use of water under this right for domestic supply or stock water, the amount authorized under the Board's modified decision will be relied upon for consideration of this change application.

Future Land Use

If this Change Application is approved, the land historically irrigated under Court Claim No. 02223 will likely be fallowed as provisioned. The subject field is described and delineated by Environmental Science Associates Adolfsen (Adolfsen) as a Category II wetland (Adolfsen, 2007.) During a 2007 field investigation, Adolfsen scientists noted that the subject wetland soils were saturated within 12 inches of the soil surface throughout the field. It appears that a variety of natural and planted vegetation utilize this seasonally high water table. Because the spring authorized under Court Claim No. 02223 currently flows across the subject field through natural and unnatural means (ditches and rills), cultivation of the land historically irrigated under Court Claim No. 02223 must remain fallow to assure that water placed into the Trust Water Rights Program is not appropriated and available for the purposes of water banking in order to offset the consumptive use associated with new groundwater use. If the land is not fallowed, the trust water right cannot be protected and it will fail to serve as mitigation for new uses.

Proposed Use

The applicant proposes to change CS4-02223CTCL to trust for the purposes of instream flow and water banking in order to offset the consumptive use associated with new groundwater uses consistent with Chapter 173-539A WAC (November 25, 2009).

Other Rights Appurtenant to the Place of Use

A review of Ecology's records and database did not reveal any other rights or claims which are appurtenant to the subject property.

Trust Water Right Calculations

Water has been used on the subject property for irrigation, domestic purposes, and stock water under Court Claim No. 02223. While the Board's 2006 modified decision authorized a change in purpose and point of withdrawal, actual water use has not changed. Therefore, the trust water right calculations will be based on recent uses and Ecology's modification of the Board's 2006 decision. In that decision, Ecology affirmed a tentative determination of 0.98 cfs and 98 acre-feet for irrigation from April 15 to September 30, 0.02 cfs and 2 acre-feet for year round domestic supply, and 0.01 cfs and 1 acre-feet for stock water from April 15 to September 30.

In general, water used for irrigation is typically not constantly diverted over the irrigation period. Water use often begins at a lower rate during the beginning of the growing season, ramps up during the warmer part of the season and decreases again in the later part of the season. Irrigation may also be interrupted during repairs and modifications to the irrigation system, or to dry and harvest crops.

Water use on the Meadow Springs land has not been directly measured. In the absence of direct water use records, Ecology uses various methods to estimate the amount of water used and consumed. One source of information frequently used by Ecology to estimate water used for irrigation is the Natural Resources Conservation Service's *Washington Irrigation Guide* (WIG). The WIG data show the estimated average amount of water required by the crop, crop irrigation requirement (CIR), in addition to the existing moisture in the root zone under average climatic conditions.

The WIG data and Ecology's Guidance Document GUID 1210, *Determining Irrigation Efficiency and Consumptive Use*, were used to determine irrigation efficiency (Ea), total irrigation requirement (TIR), and the consumptive use (CU) associated with irrigation on the Pasco property. The WIG CIR value of 18.11 inches per acre of pasture and Ecology's affirmed 98 ac-ft/yr for the irrigation of 34 acres. This represents an Ea of 52% which is reasonable for flood irrigation. Given the local growing conditions and method of application, evaporative losses were estimated at five percent of the TIR. For 34 acres, the total CU associated with irrigation under this right is estimated at 53.8 ac-ft/yr. The remaining portion of used water which is not consumed is considered to be return flow.

Ecology affirmed the Board's tentative determination of two ac-ft for year round domestic supply and one acre-foot for stock water from April 15 to September 30. These values were used in conjunction with Ecology's determination that the total consumptive use under this right has been limited to 55.0 ac-ft/yr (leaving 46 acre-feet as non-consumptive). As a result, collective CU associated with year round domestic use and seasonal stock water appropriation is estimated to 1.2 acre-feet.

Trust Water Place of Use

Ecology typically manages its trust water rights by defining a primary and a secondary reach. The primary reach is the length of stream between the historic point of diversion and where any of the water diverted, but not consumed, returns to the stream. The secondary reach begins at the downstream end of the primary reach and is defined as that length of stream which benefits from a reduction in consumptive use.

The primary reach under this application begins from the historic authorized point of diversion being approximately 800 feet north and 100 feet west from the southeast corner of Section 2, T. 19 N., R. 14 E.W.M. The entire court awarded amounts (1.01 cfs and 101 ac-ft/yr) are being placed into trust and those quantities will benefit the primary reach for the times to which they were prescribed.

The secondary reach begins on an unnamed perennial stream at a point just down gradient from the eastern extent of historic irrigation approximately 2,390 feet west and 250 feet south of the NE¼ of Section 12, T. 19 N., R. 14 E.W.M. This unnamed stream flows into Spex Arth Creek which is a tributary of the Yakima River. The consumptive use associated with this right is eligible for protection as a trust water right in the secondary reach as described in Table 2 below.

However, this water right is proposed to be changed to instream flow and water banking. As such, this trust water right is intended to serve as mitigation for new water rights from surface water sources and/or sources hydraulically related to the Yakima River consistent with Chapter 173-539A WAC. These new appropriations, if approved, will be water budget neutral with respect to the "total water supply available," but the trusting of this right may not derive a specific reach benefit eligible for protection after the new appropriation(s) are authorized.

Table 2
Instream Flow in Secondary Reach

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Avg. Qi (cfs)	0.0*	0.0*	0.0*	0.0*	0.07	0.19	0.26	0.23	0.15	0.0*	0.0*	0.0*	---
Qa (ac-ft)	0.01	0.01	0.01	0.09	4.18	11.5	15.9	14.0	9.22	0.01	0.01	0.01	55.0

*Approximately 0.0002 cfs.

Trust Water Management

CS4-02223CTCL is proposed to be changed to instream flow and water banking. As such, the consumptive portion of water placed into trust may be available as mitigation to address the issue of impairment with respect to the consumptive use associated with new out-of-priority water rights as allowable under Chapter 173-539A WAC.

Impairment Considerations

Under RCW 90.38.040(5)(a), a trust water right may be exercised only if Ecology first determines that the authorization will not impair or injure any other water right. An attempt was made to identify any third parties who may be potentially affected by an approval of this change application.

Public Interest Considerations

When investigating a change application, Ecology is required to consider whether the change is detrimental to the public interests. Ecology must consider how the change will affect an array of factors such as wildlife habitat, recreation, water quality, and human health. The environmental amenities and values associated with the area were taken into account during the consideration of this change application.

Consideration of Protests and Comments

No protest or comments related to this change application were received for consideration.

CONCLUSIONS

- Change Authorization No. CS4-02223CTCL is appurtenant to the subject property, the subject land has been historically irrigated, stock have historically used the water allocation for that purpose and domestic water has been appropriated – all from the unnamed spring confirmed in Acquavella Court Claim No. 02223.
- The author makes a tentative determination that Change Authorization No. CS4-02223CTCL represents a valid right to divert water from a well in quantities up to 1.01 cfs and 101 ac-ft/yr for the purpose of municipal supply, from April 15 through September 30.
- No water rights will be impaired or injured by no longer diverting 1.01 cfs from the unnamed spring confirmed under Acquavella Court Claim 02223.
- Changing the purpose of this water right to instream flow and water banking are not contrary to the public interest.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that the request for change to Change Application No. CS4-02223CTCL be approved in the amounts and within the limitations listed below and subject to the provisions listed above.

Place of Use:

Unnamed Stream

Trust Water Right Attributes:

Primary Reach:

0.99 cfs, 99 ac-ft/yr from April 15 to September 30 for instream flow purposes in the primary reach.

0.02 cfs, 2 ac-ft/yr for year round instream flow purposes in the primary reach.

The primary reach begins at a point approximately 800 feet north and 100 feet west from the southeast corner of Section 2, T. 19 N., R. 14 E.W.M.

Secondary Reach:

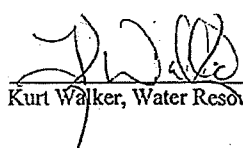
55.0 ac-ft/yr for instream flow purposes in the secondary reach as follows:

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Avg. Qi (cfs)	0.0*	0.0*	0.0*	0.0*	0.07	0.19	0.26	0.23	0.15	0.0*	0.0*	0.0*	---
Qa (acre-feet)	0.01	0.01	0.01	0.09	4.18	11.5	15.9	14.0	9.22	0.01	0.01	0.01	55.0

*Approximately 0.0002 cfs.

The secondary reach begins at a point on an unnamed stream approximately 2,390 feet west and 250 feet south of the NE¼ of Section 12, T. 19 N., R. 14 E.W.M., and ends at the confluence of the Yakima River and the Columbia River.

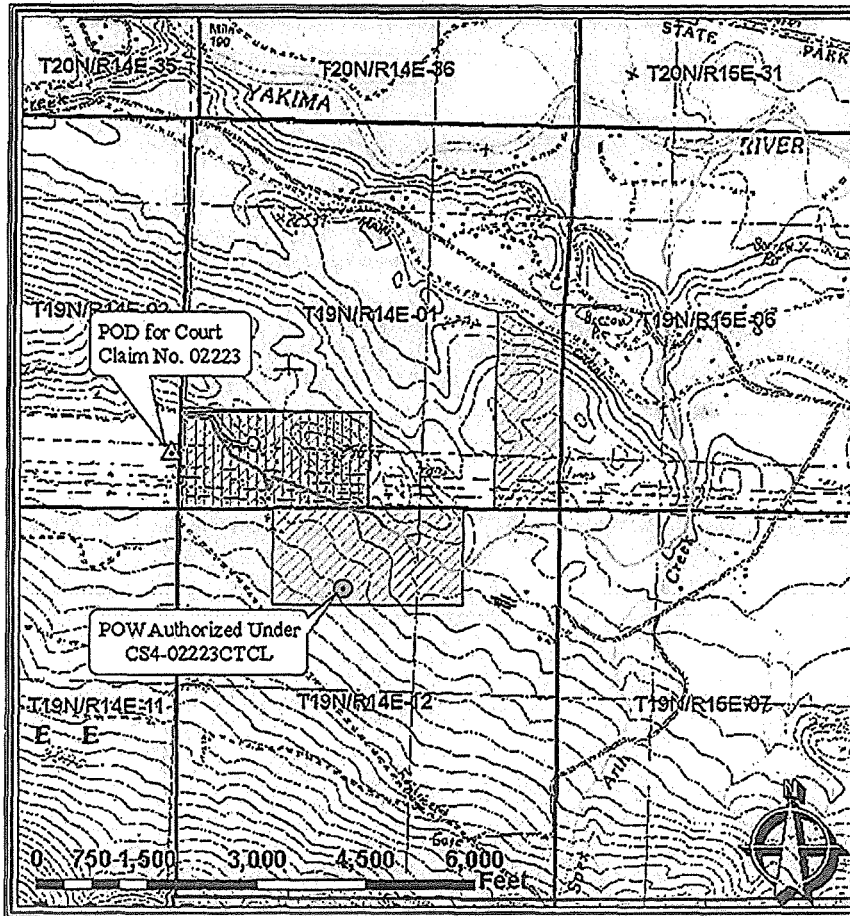
Report by:


Kurt Walker, Water Resources Program

4-19-10
Date

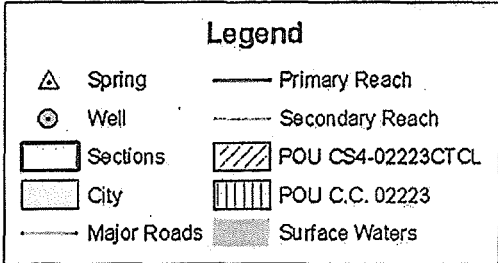
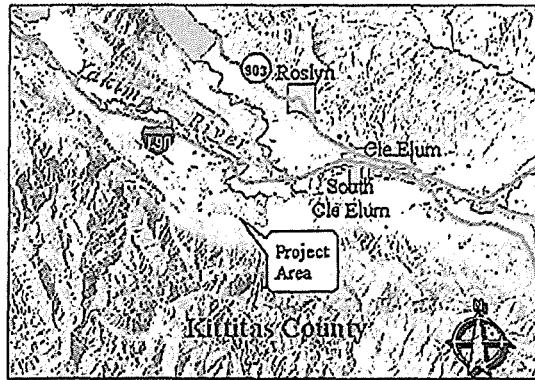
REFERENCES

- ESA Adolfsen, 2007. Technical Report: Meadow Springs, Starlite Estates, and Tamarack Ridge Wetland Report.
- Morrice, J. and Flynn, T. 2009. Technical Memorandum regarding Calculation of Evapotranspiration Rates and Crop Irrigation Requirements, Project No. 070207.
- Morrice, J. and Flynn, T. 2009. Technical Memorandum regarding Current and Proposed Water Use Estimates Northland Resources, L.L.C. Development Projects, Project No. 070207.
- Natural Resources Conservation Service, 1997. *Washington Irrigation Guide. Appendix B: Climatic Station for Consumptive Use (WA 210-VI-WAIG)*.
- State of Washington, Department of Ecology v. Acquavella, et al., Yakima County Superior Court Case No. 77-2-01484-5, Reports of Referee Subbasin No. 2 (Easton).



WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

Meadow Springs LLC
CS4-02223CTCLsb2@1



Attachment 1

ATTACHMENT A – EXHIBIT 2

**GREEN CANYON, LLC (HENSHAW WATER RIGHT)
DRAFT REPORT OF EXAMINATION (UNDATED)**



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

**TRUST WATER RIGHT
REPORT OF EXAMINATION**
Change of Purpose of Use to Instream Flow and Water Banking
WRTS File No.: CS4-00365CTCLsb5

PRIORITY DATE	CLAIM NO.	PERMIT NO.	CERTIFICATE NO.
June 5, 1886	Acquavella Court Claim No. 00365	N/A	N/A

NAME OF PARTY CONVEYING RIGHT TO TRUST WATER RIGHTS PROGRAM		
Green Canyon LLC		
ADDRESS/STREET	CITY/STATE	ZIP CODE
206 West First Street	Cle Elum, WA	98922-1108

TRUST WATER RIGHT ATTRIBUTES		
SOURCE		
Yakima River		
TRIBUTARY OF (IF SURFACE WATERS)		
N/A		
MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
0.67	N/A	120.9

QUANTITY, TYPE OF USE, PERIOD OF USE

Primary Reach*
0.67 cubic feet per second (cfs), 120.9 acre-feet per year (ac-ft/yr) for the purpose of instream flow and water banking from April 20 through September 30.

Secondary Reach*

Instream Flow in Secondary Reach						
	May	June	July	August	Sept.	Total
Avg. Qi (cfs)	0.02	0.29	0.47	0.41	0.28	---
Qa (ac-ft)	1.4	17.2	28.7	25.2	16.5	89.0

*Only the portion of the right which is not being used as mitigation will be eligible for protection.

HISTORIC POINT OF DIVERSION OR WITHDRAWAL					
APPROXIMATE LOCATION OF HISTORIC DIVERSION					
750 feet south and 1,150 feet east from the north quarter corner of Section 35, T. 20 N., R. 15 E.W.M.					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE	WRIA	COUNTY
SE¼NW¼NE¼	35	20 N.	15 E.W.M.	39	Kitititas
PARCEL NUMBER	LATITUDE	LONGITUDE		DATUM	
754735	-120.93	47.19		NAD 27	

AFFECTED REACHES – DESCRIPTION OF PLACE OF USE
[See Attachment 1 for map of the trust water right location]

PLACE OF USE: Yakima River

Primary Reach: Begins at a point approximately 750 feet south and 1,150 feet east from the north quarter corner of Section 35, T. 20 N., R. 15 E.W.M. (approximately Yakima River Mile 181.5).

Secondary Reach: Begins at a point approximately 1,550 feet north and 740 feet west from the SE¼ of Section 31, T. 20 N., R. 16 E.W.M. (approximately Yakima River Mile 179).

TRUST WATER RIGHT TERM	
BEGIN DATE	END DATE
Permanent	N/A



**PORTION OF WATER RIGHT
NOT PLACED INTO TRUST
WRTS File No.: CS4-00365CTCLsb5**

PRIORITY DATE	CLAIM NO.	PERMIT NO.	CERTIFICATE NO.
June 5, 1886	Acquavella Court Claim No. 00365	N/A	N/A

NAME Estate of Hazel and Bernard Henshaw		
ADDRESS/STREET	CITY/STATE	ZIP CODE
PO Box 234	Cle Elum	98922

WATER RIGHT ATTRIBUTES

SOURCE Yakima River		
TRIBUTARY OF (IF SURFACE WATERS) N/A		
MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
0.85	N/A	48.34
QUANTITY, TYPE OF USE, PERIOD OF USE 48.1 acre-feet for irrigation of 15.5 acres from April 20 through September 30. 0.24 acre-feet for stock water from April 20 through September 30.		

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION—WITHDRAWAL 750 feet south and 1,150 feet east from the north quarter corner of Section 35, T. 20 N., R. 15 E.W.M.					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE [E. or W.] W.M.	WRIA	COUNTY
SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$	35	20 N.	15 E.W.M.	39	Kittitas
PARCEL NUMBER	LATITUDE	LONGITUDE	DATUM		
754735	-120.93	47.19	NAD 27		

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED
[See Attachment 2 for a map of the place of use and point(s) of diversion or withdrawal]

PLACE OF USE S $\frac{1}{2}$ S $\frac{1}{4}$ of Government Lot 3, Government Lot 4 and the SE $\frac{1}{4}$ SW $\frac{1}{4}$ EXCEPT the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, All in Section 30, T. 20 N., R. 16 E.W.M.
--

DESCRIPTION OF WATER SYSTEM

The Henshaw land is supplied water through the Younger Ditch, which flows approximately one mile from the Yakima River to the subject property. Water is pumped from Younger Ditch with either a 10 horsepower (HP) or 15 HP pump which is located near the western and eastern boundaries of place of use (POU).

Approximately 13 acres of pasture and alfalfa is irrigated with a mixture of wheel lines, solid-set, and big gun sprinklers. Approximately 2 acres of lawn and garden are irrigated with domestic sprinklers.

The Henshaw stock drink directly from Younger Ditch or a small pond which is open to the ditch during the authorized season. The stock drink from troughs filled with well water during when the ditch is not in operation.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL USE BY THIS DATE
N/A	N/A	N/A

PROVISIONS

Provisions related to the Trust Water Right

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times wells or diversions and associated distribution systems for compliance with water law.

Provisions Related to the Portion of the Water Right Not Placed Into Trust

Water use confirmed under Court Claim No. 00365 shall be reduced to 0.83 cfs and 48.1 ac-ft/yr for the irrigation of 15.5 acres and 0.02 cfs and 0.24 ac-ft/yr for stock water, all from April 20 through September 20.

The remainder of Court Claim No. 00365 shall comply with the *Order Requiring Metering Measuring, and Reporting Requirements, All Subbasins (1-31) in Benton, Kittitas, and Yakima Counties* entered September 15, 2005, in the Yakima Adjudication. A copy of the order is included with hard copies. The order may be viewed at the following web site: <http://www.ecy.wa.gov/programs/wr/measuring/images/pdf/order772014845.pdf>.

Water use data shall be recorded monthly and maintained by the property owner for a minimum of five years. The maximum rate of diversion/withdrawal and the annual total volume shall be submitted to the Department of Ecology by January 31st of each calendar year.

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use that are kept to meet the above provisions, and to inspect at reasonable times any measuring device used to meet the above provisions.

The intake(s) shall be screened in accordance with Department of Fish and Wildlife screening criteria (pursuant to RCW 77.57.010, RCW 77.57.070, and RCW 77.57.040). Contact the Department of Fish and Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091. Attention: Habitat Program. Phone (360) 902-2534 if you have questions about screening criteria. <http://www.wdfw.wa.gov/reg/regions.htm>

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times wells or diversions and associated distribution systems for compliance with water law.

FINDINGS OF FACT AND ORDER

Upon reviewing the investigator's report, I find all facts relevant and material to the subject application have been thoroughly investigated. Furthermore, I find the change of water right as recommended will not be detrimental to existing rights or detrimental to the public interest.

Therefore, I ORDER the requested change of place and purpose of use under Trust Water Right Application No. CS4-00365CTCLsb5, be approved subject to existing rights and the provisions specified above.

This Decision may be appealed pursuant to RCW 34.05.514(3), RCW 90.03.210(2), and Pretrial Order No. 12 entered in *State of Washington, Department of Ecology v. James Acquavella, et al.*, Yakima County Superior Court No. 77-2-01484-5 (the general adjudication of surface water rights in the Yakima River Basin). The person to whom this Decision is issued, if he or she wishes to file an appeal, must file the notice of appeal with the Yakima County Superior Court within **thirty (30) days of receipt of this Decision**. Appeals must be filed with the Superior Court Clerk's Office, Yakima County Superior Court, 128 North 2nd Street, Yakima WA 98901, RE: Yakima River Adjudication. Appeals must be served in accordance with Pretrial Order No. 12, Section III ("Appeals Procedures"). The content of the notice of appeal must conform to RCW 34.05.546. Specifically, the notice of appeal must include:

- The name and mailing address of the appellant;
- Name and address of the appellant's attorney, if any;
- The name and address of the Department of Ecology;
- The specific application number of the decision being appealed;
- A copy of the decision;
- A brief explanation of Ecology's decision;
- Identification of persons who were parties in any adjudicative proceedings that led to Ecology's decision;
- Facts that demonstrate the appellant is entitled to obtain judicial review;
- The appellant's reasons for believing that relief should be granted; and
- A request for relief, specifying the type and extent of relief requested.

The "parties of record" who must be served with copies of the notice of appeal under RCW 34.05.542(3) are limited to the applicant of the decision subject to appeal, Ecology and the Office of the Attorney General.

All others receiving notice of this Decision, who wish to file an appeal, must file the appeal with the Yakima County Superior Court within thirty (30) days of the date the Order was mailed. The appeal must be filed in the same manner as described above.

Mark Schuppe, Section Manager
Water Resources Program/CRO

DRAFT

BACKGROUND

Description and Purpose of Proposed Change

On July 16, 2009, Dave Blanchard of Northland Resources and Green Canyon LLC, applied to place a portion of Court Claim No. 00365 into the State Trust Water Right Program. This application along with four other Trust Water Right Applications (CS4-02223CTCLsb2@1, CS4-01676(B)CTCL@1, CS4-01296CTCsb5@1(A), CS4-01296CTCLsb5@1(B)) were submitted by Northland Resources and associated LLC's for the purposes of water banking in order to offset the consumptive use associated with new groundwater uses.

Attributes of the Court Claim No. 00365 and Proposed Change

Table 1
Summary of Existing Attributes and Proposed Changes to Water Right No. CS4-00365CTCLsb5

Attributes	Documented	Proposed
Name	The Estate of Hazel and Bernard Henshaw	N/A
Priority Date Date of Application for Change	Priority Date - June 5, 1886	Application Date - July 16, 2009
Instantaneous Quantity	1.5 cfs for irrigation 0.02 cfs for stock water 0.3 cfs for conveyance loss	0.67 cfs In Trust 0.83 for irrigation 0.02 cfs for stock water 0.3 cfs for conveyance loss
Annual Quantity	450 acre-feet for irrigation 3 acre-feet for stock water	120.9 acre-feet In trust 48.1 acre-feet for irrigation 0.24 acre-feet for stock water
Source	Yakima River	No Change
Point of Diversion/Withdrawal	750 feet south and 1,150 feet east from the north quarter corner of Section 35, T. 20 N., R. 15 E.W.M.	No Change
Purpose of Use	Irrigation of 75 acres Stock water	In Trust Irrigation of 15.5 acres Stock water
Period of Use	April 20 through September 30	No Change
Place of Use	S $\frac{1}{2}$ S $\frac{1}{2}$ of Government Lot 3, Government Lot 4 and the SE $\frac{1}{4}$ SW $\frac{1}{4}$ EXCEPT the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, All in Section 30, T. 20 N., R. 16 E.W.M.	Trust Portion: See Primary and Secondary Reach descriptions on page 1 Non-Trust Portion: No Change

Legal Requirements for Proposed Change

The following is a list of requirements that must be met prior to authorizing the proposed change in Water Right Change Application No. CS4-00365CTCL.

- **Public Notice**
Notice was published by the applicant in *The Daily Record* of Ellensburg for two consecutive weeks, commencing on October 24, 2009, and October 31, 2009.
- **State Environmental Policy Act (SEPA)**
This application is categorically exempt from the provisions of the SEPA, due to the fact that the water quantities proposed for change are proposed for less than 1.0 cfs. While the projects relying on this Trust Water Right Application are not exempt from SEPA, Ecology may proceed with exempt aspects of the proposals so long as the requirements of WAC 197-11-070 are met. Those requirements being: the agency actions will not have an adverse environmental impact; or, if such action would not limit the choice for reasonable alternatives. Issuing this trust water right will not result in an adverse environmental impact and will not limit the choice for reasonable alternatives.

- **Water Resources Statutes and Case Law**
 - RCW 90.03.380(5)(b) states that applications relating to existing surface or ground water rights may be processed and decisions on them rendered independently of processing and rendering decisions on pending applications for new water rights within the same source of supply without regard to the date of filing of the pending applications for new water rights.
 - RCW 90.38.040(1) states that all trust water rights acquired by the Department of Ecology (Ecology) shall be placed in the Yakima River Basin Trust Water Right Program to be managed by Ecology. Ecology shall issue a Certificate of Water Right in the name of the state of Washington for each trust water right it acquires.
 - RCW 90.42.100(1) states that Ecology is authorized to use the Trust Water Right Program in the Yakima River basin for water banking purposes.
 - RCW 90.42.100(2)(a) states that water banking may be used to mitigate for any beneficial use under chapter 90.03, 90.44, or 90.54 RCW, consistent with any terms and conditions established by the transferor, except that return flows from water rights authorized in whole or in part for any purpose shall remain available as part of the Yakima basin's total water supply available and to satisfy existing rights for other downstream uses and users.
 - RCW 90.42.100(2)(b) states that water banking may be used to transfer water rights to and from the Trust Water Right Program.

INVESTIGATION

The water right change investigation was conducted by Kurt Walker, Ecology Permit Writer. A site investigation was made on September 8, 2009, and was attended by Joseph Morrice of Aspect Consulting. Additional information regarding the use of water was obtained through:

- Documentation submitted by the applicant, their consultants, and their attorney including:
 - Project overview Memorandum by Aspect Consulting dated June 1, 2009.
 - Technical Memorandum regarding Evapotranspiration by Aspect Consulting dated July 29, 2009.
 - Power records.
- Conversations with:
 - Bernard Henshaw.
 - Joseph Morrice.
 - Timothy Flynn.
 - Lisa Pelly.
- Review of digitized topographic maps and aerial photographs.
- Yakima County Superior Court *Reports of Referee* on the Yakima River Basin Water Rights Adjudication for Subbasin No. 5 (Elk Heights).

History of Water Use

Court Claim No. 00365 of the Acquavella Adjudication is appurtenant to the Henshaw property. Under Court Claim No. 00365, Mr. Henshaw is authorized to use water from the Younger Ditch which flows approximately one and a half miles from a diversion on the Yakima River to the subject property. Water diverted under the Henshaw right is pumped from two separate locations and is used to serve two primary irrigation systems; one north of the ditch and one south of the ditch. In the fall of 2005, Mr. Henshaw sold a portion of his land which was previously irrigated through the North system. Mr. Henshaw included 6.5 ac-ft/yr of consumptive use as part of the land sale. The 2005 irrigation season represents the highest irrigation use (57.7 acres) in the last five years and will be relied upon for making a tentative determination of the extent and validity of the right. This amount will be reduced by 6.5 ac-ft/yr to account for the sale of water in 2005.

See Attached Map (Attachment 1) for POU and POD locations.

The Henshaw irrigation system is composed of the North and South irrigation systems, movable big guns, and domestic irrigation. The North and South irrigation systems were used to irrigate roughly 45 acres (see detailed description below). Tripod mounted big guns are reported to be used on approximately 10 acres of land which do not have permanent delivery lines. The two domestic residences irrigate approximately two acres total with a variety of small sprinklers.

The North system delivers water to approximately 29 acres of irrigated alfalfa. The delivery system consisted of four wheel lines with 4-inch-diameter irrigation and conveyance pipe. The wheel lines were constructed with 40-foot pipe sections, with one impact sprinkler (5/32" or 9/64" nozzle size, depending on soil drainage) per section. A total of about 50 impact sprinklers are associated with these wheel lines. The North system also includes a number of higher capacity sprinklers, with a reported flow rate of 30 gallons per minute (gpm). The North system is served by a single 15 HP centrifugal pump (reported capacity of 400 gpm) with a dedicated power drop which is located on the western property boundary.

The South system delivers water to approximately 16 acres of irrigated pasture and alfalfa. The South system consists of a single wheel line with 4-inch-diameter irrigation and conveyance pipe, big gun sprinklers, and solid set impact sprinklers. The wheel line is constructed with thirty-two 40-foot pipe sections, with one impact sprinkler (9/32", 5/32", or 9/64" nozzle size, depending on soil drainage) per section. The nozzle size of the big guns is up to 0.8". The South can be served by either a 10 HP or 15 HP centrifugal pumps (maximum reported capacity of 400 gpm) which are located near the eastern property boundary.

Mr. Henshaw raises cattle on the property, and they drink directly from Younger Ditch or a small pond which is open to the ditch. The cattle drink from troughs filled with well water when the ditch is not in operation.

Ecology can change a water right to the extent which it has been put to beneficial use (RCW 90.03.380), so long as no period of five successive years of non-use has occurred without sufficient cause (RCW 90.14.140-180). Pursuant to the Conditional Final Order dated February 8, 2001 for Subbasin 5 of the , Court Claim No. 00365 was confirmed a right to divert up to 1.5 cfs and 450 ac-ft/yr for the irrigation of 75 acres, and 0.02 cfs and 3 acre-feet for stock water. However, the greatest land use within the last five years (2005) amounted to less than the full court award. The two pump stations can deliver the full authorized instantaneous quantity (1.5 cfs), and 2005 power records show that approximately 178 acre-feet of water was pumped for the purpose of irrigation. The sale of water in 2005 of 6.5 acre-feet of consumptive use equates to approximately 8.8 ac-ft/yr of annual use. 8.8 acre-feet equates to approximately 2.8 acres of irrigation under this right (see Table 2).

Table 2
Water Use associated with Irrigation

Water Use	Total Use (acre-feet)	Consumptive Use (acre-feet)	Irrigation (acres)
Use in 2005	178.0	131.0	57.7
Sold in 2005	8.8	6.5	2.8
Change to Trust	120.9	89.0	39.2
Remaining in Irrigation	48.1	35.5	15.5

An estimate of stock water use is based on a water demand requirement listed in the Washington State Department of Health Water System Design Manual (DOH, 2001). The listed stock water requirement for cattle is 12 gallons per days per head. Based on 40 cattle for a period of use from April 20 through September 30 (164 days), the annual stock water use is estimated at 0.24 ac-ft/yr. As a result, Ecology recognizes 1.5 cfs and 169.2 ac-ft/yr for the irrigation of 54.9 acres, and 0.02 cfs and 0.24 ac-ft/yr for stock water as the extent of the right and as the quantities available for change.

Proposed Use

The applicant proposes to change a portion of Court Claim No. 00365 to trust for the purposes of instream flow and water banking in order to offset the consumptive use associated with new groundwater uses.

Other Rights Appurtenant to the Place of Use

A review of Ecology's records and database did not reveal any other rights or claims which are appurtenant to the Henshaw property.

Trust Water Right Calculations

Water used for irrigation is not constantly diverted over the irrigation period. Water use often begins at a lower rate during the beginning of the growing season, ramps up during the warmer part of the season and decreases again in the later part of the season. Irrigation may also be interrupted while moving sprinklers, or to dry and harvest crops.

In the absence of direct water use records, Ecology uses various methods to estimate the amount of water used and consumed. One source of information frequently used by Ecology is the WIG. The WIG data show the estimated average amount of water required by the crop or crop irrigation requirement (CIR) in addition to the existing moisture in the root zone under average climatic conditions. The WIG is currently being updated by Washington State University (WSU) to include additional climatic stations, up to date estimates of evapotranspiration (ET). For purposes of this change application, CIR values for alfalfa in the Cle Elum area were calculated using the American Society of Civil Engineers (ASCE) Penman-Monteith method and available climate data. The ASCE Penman-Monteith method is one of the methods currently being used by WSU to estimate monthly CIR values.

Ecology's Guidance Document GUID 1210, *Determining Irrigation Efficiency and Consumptive Use*, was used to determine irrigation efficiency (Ea) and consumptive use (CU). The CIR was estimated at 23.55 inches (1.96 ac-ft/yr) using the ASCE Penman-Monteith and local climatic data. Given the local growing conditions and main method of application, impact sprinklers on a wheel line, evaporative losses are estimated at ten percent of the total irrigation requirement (TIR). TIR is assumed to equal the 2005 estimated use value of 178 acre-feet. Applying these values to the equation $CU = [(TIR \times Evap) + CIR]$, the CU associated with the irrigation of 57.7 acres equates to 131.0 ac-ft/yr.

In 2005, Mr. Henshaw sold 6.5 ac-ft/yr of consumptive use from Court Claim No. 00365. Of the 124.5 acre-feet of consumptive use remaining from the irrigation portion of the right, 89.0 acre-feet is proposed to be changed while 35.5 acre-feet will remain in irrigation.

The CU for the portion of Court Claim No. 00365 being placed into the State Trust Water Right Program (TWRP) is shown on Table 3 in instantaneous and annual quantities by month. The portion of used water which is not consumed is considered to be return flow.

Instream Flow in Table 3
Secondary Reach

	May	June	July	August	Sept.	Total
Avg. Qi (cfs)	0.02	0.29	0.47	0.41	0.28	---
Qa (acre-feet)	1.4	17.2	28.7	25.2	16.5	89.0

Water Not Placed in Trust

The remaining portion of Court Claim No. 00365 which has not been sold and is not placed in trust will continue to be exercised within the court awarded season of use and POU. Considering the 2005 CU and irrigated acres listed above, 131 acre-feet and 57.7 acres respectively, Mr. Henshaw will be able to irrigate 15.5 acres total after the change (see Equation 1). The maximum annual diversion (Qa) is limited to 48.1 acre-feet (see Equation 2). The maximum instantaneous rate of diversion (Qi) is limited to 0.83 cfs for irrigation. This amount equates to the remainder of the amount necessary to satisfy the average Qi associated with the peak TIR related to the water use placed in trust (see Equation 3). In addition to irrigation, Mr. Henshaw is authorized to divert 0.02 cfs and 0.24 ac-ft/yr for of stock water.

Equation 1. Remaining Consumptive Use and Irrigation

$$131 \text{ acre-feet} \div 57.7 \text{ acres} = 2.3 \text{ acre-feet per acre}$$

Thus,

$$CU = 35.5 \text{ acre-feet} \div 2.3 \text{ acre-feet per acre} = 15.5 \text{ acres}$$

Equation 2. Maximum Qa

$$178 \text{ acre-feet} \div 57.7 \text{ acres} = 3.1 \text{ acre-feet per acre}$$

Thus,

$$Qa = 3.1 \text{ acre-feet per acre} \times 15.5 \text{ acres} = 48.1 \text{ ac-ft/yr}$$

Equation 3. Maximum Qi

Peak TIR by month is July (41.3 acre-feet)

31 days in July

1 cfs = 1.9834 acre-feet per day

Results in,

Avg. Qi to meet peak TIR = 41.3 acre-feet ÷ 31 days ÷ 1.9834 acre-feet per day = 0.67 cfs

Thus,

Qi = 1.5 cfs - 0.67 cfs = 0.83 cfs

Trust Water Place of Use

Ecology typically manages its trust water rights by defining a primary and a secondary reach. The primary reach is the length of the river between the historic point of diversion and where any of the water diverted, but not consumed, returns to the river. The secondary reach begins at the downstream end of the primary reach and is defined as that length of river which benefits from a reduction in consumptive use.

However, this water right is being changed from irrigation to instream flow and water banking. As such, this trust water right will serve as mitigation for new water rights from surface water sources and/or sources hydraulically related to the Yakima River. These new appropriations will be water budget neutral with respect to the "total water supply available," but the trusting of this right will not derive a specific reach benefit eligible for protection after the new appropriations are authorized.

Trust Water Management

Court Claim No. 00365 is being changed to instream flow and water banking. As a condition of placing this water right into the TRWP, the consumptive portion of water placed into trust may be available as mitigation to address the issue of impairment with respect to new out-of-priority water rights consistent with WAC 173-539A.

Impairment Considerations

Under RCW 90.38.040(5)(a), a trust water right may be exercised only if Ecology first determines that the authorization will not impair or injure any other water right. An attempt was made to identify any third parties who may be potentially affected by an approval of this application. Ecology sent a notice containing pertinent information to all appropriate state agencies, potentially affected local governments and federally recognized tribal governments, and other interested parties. Ecology did not receive any comments regarding the issue of impairment from any third party.

Public Interest Considerations

When investigating a change application, Ecology is required to consider whether the change is detrimental to the public interests. Ecology must consider how the change will affect an array of factors such as wildlife habitat, recreation, water quality, and human health. The environmental amenities and values associated with the area were taken into account during the consideration of this change application.

Consideration of Protests and Comments

No protest or comments were received for consideration.

CONCLUSIONS

Court Claim No. 00365 is appurtenant to the subject property. The author makes a tentative determination that Court Claim No. 00365 represents a valid right to divert water from the Yakima River in quantities up to 1.5 cfs and 169.24 acre-feet for the irrigation of 54.9 acres, and 0.02 cfs and 0.24 acre-feet for stock water, both from April 20 through September 30.

Approval of this water right change request as provisioned will not enlarge the water right or impair existing water rights.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend the request for change to Court Claim No. 00365 be approved in the amounts and within the limitations listed below and subject to the provisions listed in the Report of Examination.

Trust Water Right Attributes

Primary Reach*

0.67 cfs (cfs), 120.9 ac-ft/yr for the purpose of instream flow and water banking from April 20 through September 30.

Secondary Reach*

Table 2
Instream Flow in Secondary Reach

	May	June	July	August	Sept.	Total
Avg. Qi (cfs)	0.02	0.29	0.47	0.41	0.28	---
Qa (acre-feet)	1.4	17.2	28.7	25.2	16.5	89.0

*Only the portion of the right which is not being used as mitigation will be eligible for protection.

Attributes the Portion Not Placed in Trust

0.83 cfs, 48.1 ac-ft/yr for the irrigation of 15.5 acres from April 20 to September 30.

0.02 cfs, 0.24 ac-ft/yr for stock water from April 20 to September 30.

Point of Diversion

750 feet south and 1,150 feet east from the north quarter corner of Section 35, T. 20 N., R. 15 E.W.M.

Place of Use

S½S½ of Government Lot 3, Government Lot 4 and the SE¼SW¼ EXCEPT the SE¼SE¼SW¼, All in Section 30, T. 20 N., R. 16 E.W.M.

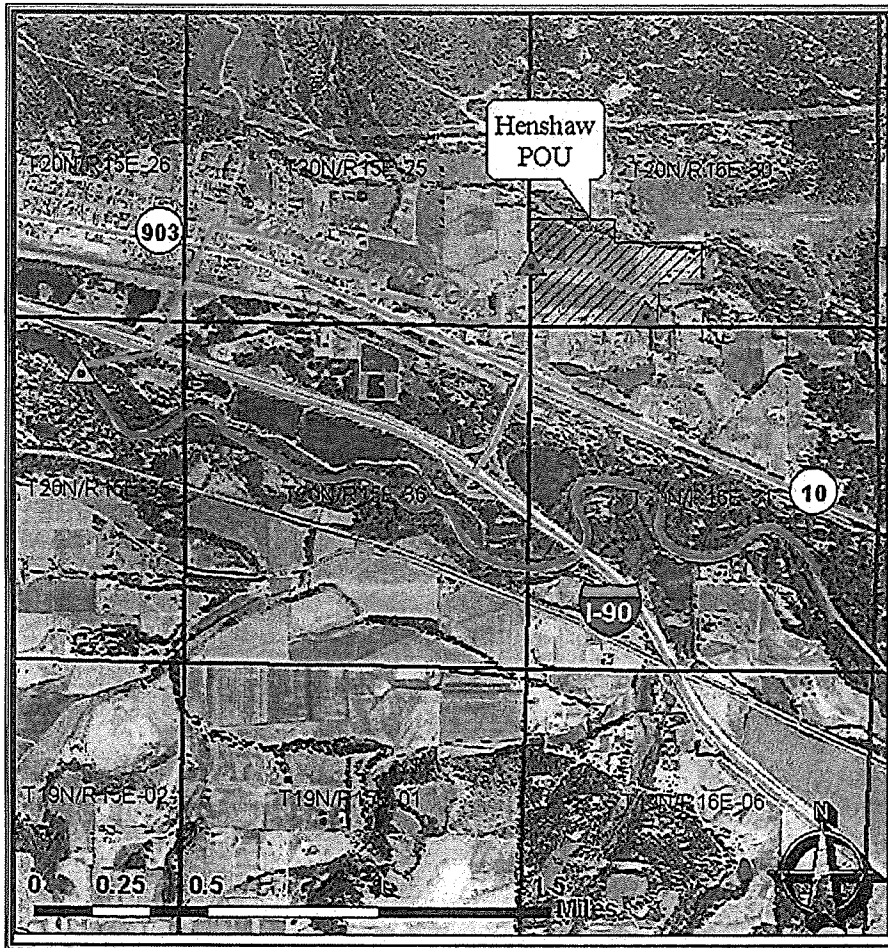
Report by: _____

Kurt Walker
Water Resources Program

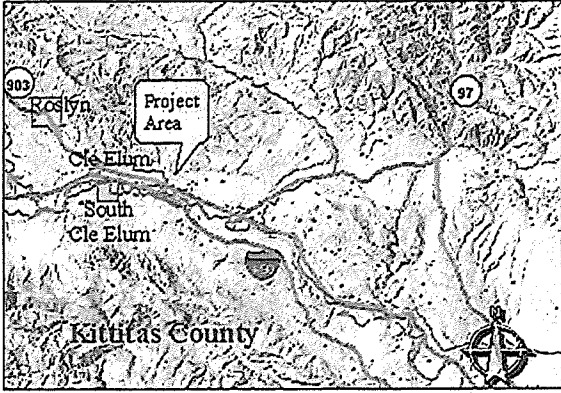
_____ Date

REFERENCES

- Morrice, J. and Flynn, T. 2009. Technical Memorandum regarding Calculation of Evapotranspiration Rates and Crop Irrigation Requirements, Project No. 070207.
- Morrice, J. and Flynn, T. 2009. Technical Memorandum regarding Current and Proposed Water Use Estimates Northland Resources, L.L.C. Development Projects, Project No. 070207.
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- United States Geologic Survey, 1995. Provisional data of Livestock (stock) water use, by County, for Washington 1995. Available on line at: <http://wa.water.usgs.gov/data/vwuse/main.cnty.95.txt>
- State of Washington, Department of Ecology v. Acquavella, et al., Yakima County Superior Court Case No. 77-2-01484-5, Reports of Referee Subbasin No. 5 (Elk Heights).
- Washington State Department of Health, 2001. *Water System Design Manual. Chapter 5, Water Demand Requirements.* Available on line at: <http://www.doh.wa.gov/ehp/dw/Publications/331-123.pdf>



**Green Canyon LLC
CS4-00365CTCLsb5**



Legend

POD	Primary Reach
Pump Location	Secondary Reach
Sections	Surface Waters
City	Place of Use
Major Roads	

Attachment 1

Newton Trust Water Right Conditions

The Newton water right has a pre-1905 priority date authorizing diversion from Younger Ditch off of the Yakima River for irrigation between May 1 and September 15. Newton was first perfected from the Teanaway River. In the Acquavella adjudication the right was confirmed for 195 afy for irrigation and 0.495 acre feet for stock water, with a condition to be regulated to protect senior water rights on the Teanaway River when water is not available at the historical point of diversion for the class 16 right.

Ecology has placed into trust the Newton water right for the Northland Water Exchange. Recognizing that the Newton's Yakima diversion is subject to curtailment in the event that flows in the Teanaway River are insufficient to satisfy senior downstream Teanaway water right diversions, a potential regulation date has been determined based on the conservative assumptions that all downstream Teanaway senior water rights are valid and are calling every year for water and without taking into account return flows from upstream diversions. There is a maximum total of 37 cfs of authorized diversions associated with 90 senior water rights downstream of the nearest active stream gage control point (United States Bureau of Reclamation Teanaway River at Forks gauge). Approximately 19 cfs of authorized diversions are associated with 41 senior water right located downstream of the historic Newton diversion. On average, flows at the control point drop below 37 cfs on July 29th, which marks the average date on which the Newton right could be curtailed.¹

Approximately 43.6 acre-feet of consumptive use is associated with exercise of the Newton right in an average year through July 29th. The remaining 30.1 acre-feet of consumptive use is associated with exercise of this right after July 29th. Newton irrigation system has the capacity to deliver the full Qa of 120 afy prior to the regulation date and within the maximum instantaneous quantity limitation (Qi) of the water right². Based on the capacity of the system and the calculation of the potential date of any regulation, the total annual consumptive use of 73.7 afy associated with the Newton right will be appropriated within a period of use limited from May 1st through July 29th.

The mitigation monthly acre feet credits in the Northland Water Exchange will therefore be as follows:

May	15.7
June	26.5
July	31.5
Aug.	0
Sept.	0
Oct.	0
	73.7 afy

¹ Daily flow data for the Teanaway River at Forks gage over the period of 1984 through 2008 were acquired from the US Bureau of Reclamation. These data were used to develop an average daily hydrograph. Based on the average hydrograph, flows in the Teanaway River at Forks drop below the 37 cfs threshold on average on July 29th. This date was used to define use of the Newton water right that, on average, is not subject to regulation from use that is subject to regulation.

² The Newton irrigation system consists of two wheel lines with 4-inch diameter irrigation pipe and a 6-inch diameter conveyance pipe. The wheel lines are constructed with 40-foot pipe sections, with one impact sprinkler (3/16" nozzle size) per section. One wheel line has 26 nozzles and the other has 28 nozzles. The wheel lines are served by a single 15 horsepower pump. Based on these data, the physical capacity of the Newton irrigation system is estimated to be about 370 gallons per minute (gpm). The maximum instantaneous quantity (Qi) authorized under the Newton right is 0.7 cfs or 314 gpm. Assuming continuous operation at 0.7 cfs from May 1st through July 29th (90 days) the Newton system is capable of producing 125 acre-feet. Therefore the Newton irrigation system can deliver the total annual use quantity of 120 afy (including the 73.7 afy of consumptive use) prior to the average potential regulation date, and within the 0.7 cfs Qi constraint of the water right.

ATTACHMENT B

*[List of water right applications and requests for determination
of water budget neutrality submitted to Department of Ecology]*

Applications for eight (8) new ground water rights:

Applicant: Misty Mountain LLC
Project Name: Fircrest
No. G4-35246
Description: Appropriation of water from a well or wells in the amount of 250 gallons per minute each year, 11 acre-feet per year for the purpose of continuous multiple domestic supply of a 27-unit residential development. The source of the proposed appropriation is located within the SE $\frac{1}{4}$ NW $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 9, T. 19 N., R. 15 E.W.M., Kittitas County, Washington.

Applicant: Green Canyon LLC
Project Name: Flatwater
No. G4-35247
Description: Appropriation of water from a well or wells in the amount of 250 gallons per minute each year, 11 acre-feet per year for the purpose of continuous multiple domestic supply of an 26-unit residential development. The source of the proposed appropriation is located within the SW $\frac{1}{4}$ of Section 30, T. 20 N., R. 16 E.W.M., Kittitas County, Washington.

Applicant: Iron Snowshoe, LLC
Project Name: Forest Ridge
No. G4-35248
Description: Appropriation from a well or wells in the amount of 250 gallons per minute, 75 acre-feet per year for the purpose of continuous multiple domestic supply of a 190-unit residential development. The source of the proposed appropriation is located within the N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, and SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 24, T. 20 N., R. 15 E.W.M. and the SW $\frac{1}{4}$ of Section 30, T. 20 N., R. 16 E.W.M., Kittitas County, Washington.

Applicant: Cool Water LLC, Fortune Creek LLC, and Saddle Ridge LLC
Project Name: Little Creek
No. G4-35249

Description: Appropriation from a well or wells in the amount of 250 gallons per minute each year, 20 acre-feet per year for the purpose of continuous multiple domestic supply of a 50-unit residential development. The source of the proposed appropriation is located within the N½ and the N½ N½SE¼ of Section 33, T. 20 N., R. 14 E.W.M., Kittitas County, Washington.

Applicant: Cool Water LLC and Fortune Creek LLC
Project Name: Woods and Steele
No. G4-35250
Description: Appropriation from a well or wells in the amount of 250 gallons per minute, 26 acre-feet per year, for the purpose of continuous multiple domestic supply of a 65-unit residential development. The source of the proposed appropriation is located within the SW¼ of Section 7, T. 19 N., R. 15 E.W.M., Kittitas County, Washington.

Applicant: Meadow Springs LLC and Stuart Vista LLC
Project Name: Meadow Springs
No. G4-35251
Description: Appropriation from a well or wells in the amount of 250 gallons per minute each year, 53 acre-feet per year, for the purpose of continuous multiple domestic supply of a 135-unit residential development. The source of the proposed appropriation is located within the E½ of Section 1; AND the S½SW¼ of Section 1; AND the NE¼NW¼ and NW¼NE¼ of Section 12; ALL in T. 19 N., R. 14 E.W.M., Kittitas County, Washington.

Applicant: Green Canyon LLC, Cooper Pass LLC, and Highmark Resources LLC
Project Name: City Heights
No. G4-35273
Description: Appropriation from a well or wells in the amount of 1,200 gallons per minute each year, 269 acre-feet per year for the purpose of continuous multiple domestic supply of a 875-unit residential development. The sources of the proposed appropriation are located within the NW¼SW¼ of Section 24, the SW¼SW¼ of Section 24, the SE¼ of Section 25, the NW¼ of Section 25, the N½ of Section 26, the N½ of Section 27, the NE¼SE¼ of Section 27, the SE¼SE¼ of Section 27, and the SW¼SE¼ of Section 30, all in T. 20 N., R. 15 E.W.M., and the SW¼ of Section 30, in T. 20 N., R. 16 E.W.M., Kittitas County, Washington.

Five (5) requests for determination of water budget neutrality:

Applicant: MC Ten, LLC
Project Name: Timber Ridge
Quantities: Annual - 3.7 afy
Consumptive - 2.2 afy

Applicant: Misty Mountain, LLC
Project Name: Tillman Heights
Quantities: Annual - 3.7 afy
Consumptive - 2.2 afy

Applicant: Cooper Pass, LLC
Project Name: Ponderosa Pines
Quantities: Annual - 4.0 afy
Consumptive - 2.4 afy

Applicant: Back Country Resources, LLC
Project Name: Evergreen Park
Quantities: Annual - 3.7 afy
Consumptive - 2.2 afy

Applicant: Northland Investments, Inc.
Project Name: Meadow Ridge
Quantities: Annual - 4.7 afy
Consumptive - 2.8 afy
