

Okanogan County  
**WATER CONSERVANCY BOARD**  
**Application for Change/Transfer**  
**Record of Decision**

For Ecology Use Only

Received:

Reviewed by: \_\_\_\_\_  
 Date Reviewed: \_\_\_\_\_

**Applicant: Crown Resources Corporation**

**Application Number: OKAN-14-01**

This record of decision was made by a majority of the board at an open public meeting of the Okanogan County Water Conservancy Board held **December 3, 2014**.

**Approval:** The Okanogan County Water Conservancy Board hereby **grants** conditional approval for the water right transfer described and conditioned within the report of examination on **December 3, 2014** and submits this record of decision and report of examination to the Department of Ecology for final review.

**Denial:** The Okanogan County Water Conservancy Board hereby **denies** conditional approval for the water right transfer as described within the report of examination on **December 3, 2014** and submits this record of decision to the Department of Ecology for final review.

Signed:

John Hubbard, Chair  
 Okanogan County Water Conservancy Board

Date: 12/3/2014

Approve   
 Deny   
 Abstain   
 Recuse   
 Other

Rod Noel, Member  
 Okanogan County Water Conservancy Board

Date: 12/3/2014

Approve   
 Deny   
 Abstain   
 Recuse   
 Other

Mark Miller, Member  
 Okanogan County Water Conservancy Board

Date: 12/3/2014

Approve   
 Deny   
 Abstain   
 Recuse   
 Other

\_\_\_\_\_  
 Lee Barker, Member  
 Okanogan County Water Conservancy Board

Date: \_\_\_\_\_

Approve   
 Deny   
 Abstain   
 Recuse   
 Other

\_\_\_\_\_  
 (Name), (Title)  
 (Board Name) Water Conservancy Board

Date: \_\_\_\_\_

Approve   
 Deny   
 Abstain   
 Recuse   
 Other

Mailed to the Department of Ecology Central Regional Office of Ecology, via certified mail, and other interested parties on \_\_\_\_\_.

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## Proposed Use

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE 300	MAXIMUM ACRE-FT/YR 125.4	TYPE OF USE, PERIOD OF USE <b>Phase 1 – Dust control, mining, industrial, drilling, instream flow (Years 0 through 10, Inclusive)*:</b> Dust control, mining, industrial, drilling, instream flow: 43 acre-ft/y, year-round. Instream flow (not diverted): 82.4 acre-ft/yr as mitigation for Buckhorn Mountain Mine water rights, April 1 to October 31.  <b>Phase 2 – Dust control, mining, industrial, drilling, instream flow, irrigation (Years 11 through 23, Inclusive):</b> Dust control, mining, industrial, drilling, instream flow, irrigation: 100.3 acre-ft/yr, year-round for non-irrigation uses. April 1 to October 31 for irrigation of up to 40 acres. Instream flow (not diverted): 25.1 acre-ft/yr as mitigation for Buckhorn Mountain Mine water rights, April 1 to October 31.  <b>Phase 3 – Dust Control, mining, industrial, drilling, instream flow, and irrigation (Year 24 onward):</b> 125.4 acre-ft/yr, year-round for non-irrigation uses. April 1 to October 31 for the irrigation of up to 50 acres.  * As it relates to the Buckhorn Mine project, Year 0 begins in December 2007, with 3 year reclamation period ending December 2018.				
SOURCE Two wells			TRIBUTARY OF (IF SURFACE WATER)				
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
3931270012	SW	SE	27	39	31	60	Okanogan
3931340001	SE	NW	34				
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED							
Dust control, mining, and industrial uses during all phases:  The NW¼NW¼ of Section 1; the NE¼NE¼, SW¼SW¼ and S½N½ of Section 2, except for the SE¼NE¼; the E½NW¼, NE¼ and SE¼SE¼ of Section 3; the NW¼, E½E½, SW¼NE¼ and SW¼SE¼ of Section 12; the N½NE¼ and W½NW¼ in Section 13; the N½SW¼ and SW¼SW¼ of Section 14; the N½SE¼ and SE¼SE¼ of Section 15; Section 16, except for the NE¼NE¼; the E¼E½ of Section 17; the N½NW¼ of Section 21; the N½NW¼, NE¼, W½SE¼, and NE¼SW¼ of Section 22; the W½NW¼ of Section 23; and the SE¼NE¼ of Section 28, all located in T. 38 N., R. 31 E.W.M.; and  Sections 1 through 4 and 11 in T. 39 N., R. 30 E.W.M.; and  Sections 2, 3, 4, and 5; the W½ of Section 26; the S½ of Section 27; Section 34; the W½, SE¼SE¼, NE¼SE¼, and SE¼NE¼ of Section 35; and the W½W½ of Section 36, except for the N½NW¼NW¼, all located in T. 39 N., R. 31 E.W.M.; and  Sections 13, 14, 24, 25, 35, and 36 in T. 40 N., R. 30 E.W.M.; and  Sections 31 and 32, T. 40 N., R. 31 E.W.M., Okanogan County.  Irrigation uses during Phase 2 and 3 will revert to the original location within that portion of the N½SE¼, SW¼SE¼, and SE¼SW¼ Section 27; and NW¼NE¼, NE¼NW¼, and SE¼NW¼ Section 34; BOTH in T. 39 N., R. 31 E.W.M., that lies northwesterly of the easterly branch of Toroda Creek and southeasterly of the county road.							
PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE.		

## Board's Decision on the Application

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE 300	MAXIMUM ACRE-FT/YR 125.4	TYPE OF USE, PERIOD OF USE <b>Phase 1 – Dust control, mining, industrial, drilling, instream flow (Years 0 through 10, Inclusive)*:</b> Dust control, mining, industrial, drilling, instream flow: 43 acre-ft/y, year-round. Instream flow (not diverted): 82.4 acre-ft/yr as mitigation for Buckhorn Mountain Mine water rights, April 1 to October 31.  <b>Phase 2 – Dust control, mining, industrial, drilling, instream flow, irrigation (Years 11 through 23, Inclusive):</b> Dust control, mining, industrial, drilling, instream flow, irrigation: 100.3 acre-ft/yr, year-round for non-irrigation uses. April 1 to October 31 for irrigation of up to 40 acres. Instream flow (not diverted): 25.1 acre-ft/yr as mitigation for Buckhorn Mountain Mine water rights, April 1 to October 31.  <b>Phase 3 – Dust Control, mining, industrial, drilling, instream flow, and irrigation (Year 24 onward):</b> 125.4 acre-ft/yr, year-round for non-irrigation uses. April 1 to October 31 for the irrigation of up to 50 acres.  * As it relates to the Buckhorn Mine project, Year 0 begins in December 2007, with 3 year reclamation period ending December 2018.				
SOURCE Two wells			TRIBUTARY OF (IF SURFACE WATER)				
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
3931270012	SW	SE	27	39	31	60	Okanogan
3931340001	SE	NW	34				
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED AS APPROVED BY THE BOARD							
Dust control, mining, and industrial uses during all phases:  The NW¼NW¼ of Section 1; the NE¼NE¼, SW¼SW¼ and S½N½ of Section 2, except for the SE¼NE¼; the E½NW¼, NE¼ and SE¼SE¼ of Section 3; the NW¼, E½E½, SW¼NE¼ and SW¼SE¼ of Section 12; the N½NE¼ and W½NW¼ in Section 13; the N½SW¼ and SW¼SW¼ of Section 14; the N½SE¼ and SE¼SE¼ of Section 15; Section 16, except for the NE¼NE¼; the E¼E½ of Section 17; the N½NW¼ of Section 21; the N½NW¼, NE¼, W½SE¼, and NE¼SW¼ of Section 22; the W½NW¼ of Section 23; and the SE¼NE¼ of Section 28, all located in T. 38 N., R. 31 E.W.M.; and  Sections 1 through 4 and 11 in T. 39 N., R. 30 E.W.M.; and  Sections 2, 3, 4, and 5; the W½ of Section 26; the S½ of Section 27; Section 34; the W½, SE¼SE¼, NE¼SE¼, and SE¼NE¼ of Section 35; and the W½W½ of Section 36, except for the N½NW¼NW¼, all located in T. 39 N., R. 31 E.W.M.; and  Sections 13, 14, 24, 25, 35, and 36 in T. 40 N., R. 30 E.W.M.; and  Sections 31 and 32, T. 40 N., R. 31 E.W.M., Okanogan County.  Irrigation uses during Phase 2 and 3 will revert to the original location within that portion of the N½SE¼, SW¼SE¼, and SE¼SW¼ Section 27; and NW¼NE¼, NE¼NW¼, and SE¼NW¼ Section 34; BOTH in T. 39 N., R. 31 E.W.M., that lies northwesterly of the easterly branch of Toroda Creek and southeasterly of the county road.							
PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE,		

## DESCRIPTION OF PROPOSED WORKS

The water supply system previously used for irrigation and planned for future irrigation consists of a well (Well 1), with a 15 horsepower pump and a distribution system consisting of 4- and 6-inch mainlines and 3-inch service lines. A second well (Well 2) is not currently used, but may be used under the proposed change. Water currently used for dust control purposes is pumped from Well 1 to trucks, then hauled to the place of use. Under the proposed change, water for dust control, mining, industrial, and drilling uses would be pumped from the existing well to trucks and hauled to the place of use.

## DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:	COMPLETE PROJECT BY THIS DATE:	COMPLETE CHANGE AND PUT WATER TO FULL USE BY THIS DATE:
N/A	N/A	December 31, 2035

The current change authorization encompasses three phases of mine and irrigation operation covering a term through Year 24 and onward. This change ROE does not modify the term of the first two phases, but merely modifies the authorized purposes for each phase.

Truck traffic will continue to use the Marias Creek haul road after initial reclamation activities are completed, requiring ongoing dust control water use. Current plans call for continued withdrawal, treatment, and recirculation of mine water after mining ceases to accelerate recovery of groundwater quality. During this period brine generated at the water treatment plant will be hauled by truck to the Kettle River Mill for disposal. Once mine water quality has recovered satisfactorily, the water treatment plant will be decommissioned and underlying construction fill will be removed and trucked off-site. The duration of mine reclamation and closure is uncertain, and depends largely on how rapidly groundwater quality and water levels in the mine recover. To accommodate this uncertainty the applicant requested an extension of Phase 3 from the end of 2015 to December 31, 2035.

## REPORT

### **BACKGROUND** [See WAC 173-153-130(6)(a)]

The following provides a summary of the history of this water right, including previous water right change decisions approved by the Department of Ecology (Ecology) or the Okanogan County Water Conservancy Board (Board).

On February 20, 1963, Jack Johnson submitted an application to the Department of Conservation requesting to appropriate groundwater at a rate of 300 gallons per minute (gpm) to irrigate 50 acres. The application was approved and water right permit No. 6242 was issued on June 7, 1963, authorizing the appropriation of 300 gpm and 200 acre-feet per year (acre-ft/yr) from a well (Well 1) to irrigate 50 acres. The permit was assigned to Kelly Hancock in July 1964. On August 26, 1964, Groundwater Certificate 4909-A was issued for the quantities and use described in the permit. The certificate, however, was issued to Jack Johnson. To correct this error, Superseding Certificate No. 4945-A was issued to Kelly Hancock on October 2, 1964. On June 18, 1981, John McCurdy, the legal land owner of the place of use described on the certificate, submitted a water right change application to add a point of withdrawal (Well 2). On April 15, 1982, the Washington State Department of Ecology (Ecology) issued a Certificate of Change of Water Right to change the place of use and add a point of withdrawal to Superseding Certificate No. 4945-A. As a condition to the additional point of withdrawal, water use from Well 2 shall be curtailed if sufficient water is not available from Well 1 to satisfy the right.

In 1992 Battle Mountain Gold Company (BMGC) entered into a lease option agreement for the water right with Jack Girard, then the legal land owner of the place of use described on the certificate. The purpose of the lease option was to secure water rights to support area mining activities, principally the development of the Crown Jewel Mine, a joint venture between Crown Resources Corporation (Crown) and BMGC at the current Buckhorn Mountain Mine site. Donnie Newman acquired the property in 1994. The lease agreement was amended in 1997 extending the lease term to 2018. In 2000, following successful appeal of project permits, BMGC withdrew from the joint venture and 100 percent of the project ownership reverted to Crown. In 2003 Kinross Gold Corporation entered into an agreement to acquire Crown and the Buckhorn Mountain Mine project, including the water right lease option. This acquisition was completed in August 2006.

On March 24, 2005, Ecology accepted a change application from Mr. Newman on groundwater Certificate of Change No. G4-CCV1-4P200. This change application requested to temporarily change the period of use, purpose of use, and place of use to year-round dust control along Marias Creek Road in support of construction and mining operations at the proposed Buckhorn Mountain Mine. A portion of the water right was also proposed for streamflow mitigation in Toroda Creek. At the end of mining and mine reclamation, the water use under the water right would revert to the original period of use, purpose of use, and place of use listed for groundwater Certificate of Change No. G4-CCV1-4P200. This application was approved by Ecology on September 26, 2006.

On June 25, 2008, Ecology accepted a temporary change application from Mr. Newman and Crown. This temporary change application requested to add lands not previously authorized along the Marias Creek haul road to the place of use for the purpose of dust control and to add lands to the place of use for the purposes of instream flow mitigation (discharge of water to the Marias Creek headwaters) to change authorization CG4-CCV1-4P200. This application was approved by Ecology on May 13, 2009.

In January 2014 the water right lease agreement was amended again, extending the lease term to April 1, 2028.

On February 5, 2014, Crown (now a subsidiary of Kinross), filed a water right change application, the subject of this Report of Examination, with the Board to add purpose of use and add place of use to water right CG4-CCV1-4P200. The application was accepted at an open public meeting on February 5, 2014, and the Board assigned application number OKAN-14-01 (Ecology File Number CG4-CV1-4P200@4).

The purpose of this water right change is to change the place of use to include potential mineral exploratory drilling locations under consideration by Crown; add mining, industrial, and drilling purposes of use to support drilling exploration; and change the period of use for seasonal, non-irrigation uses (i.e., current dust control uses) to year-round, allowing more flexibility in when water is used. All existing instream flow mitigation obligations of this water right to offset impacts of the existing Buckhorn Mountain Mine dewatering and water use would be maintained without change, and the consumptive use associated with this right would not increase.

*Attributes of the water right as currently documented (Please refer to Figure 1 for place of use and points of withdrawal)*

Name on certificate: Donnie Newman

Water right document number: CG4-CCV1-4P200

Priority date, first use: February 20, 1963

Water quantities: Qi: 300      Qa: 125.4 acre ft./ year

Source: Two wells

Point of diversion/withdrawal: Well 1: 450 feet north and 25 feet east from the south quarter corner of Section 27, T. 39N., R. 31 E.W.M.; Well 2: 1,990 feet south and 2,500 feet east from the northwest corner of Section 34, T. 39 N., R. 31 E.W.M.

**Purpose and Period of use:**

Phase 1 – During mining period and post-mining 3-year reclamation period:

Dust control use: maximum of 43 acre-feet total per year, with a maximum 34.8 acre-feet allowed between April 1 and October 31, and a maximum 8.2 acre-feet allowed between November 1 and March 31.

Instream flow mitigation: 82.4 acre-feet for streamflow mitigation in Toroda Creek. This water will not be withdrawn from the shallow aquifer system and will be allowed to naturally discharge to Toroda Creek.

Phase 2 – Following 3-year mine reclamation period until 16 years after mine closure:

Irrigation: Limited to 40 acres and 100.3 acre-feet per year

Instream flow mitigation: 25.1 acre-feet per year for streamflow mitigation in Toroda Creek during mine water level recovery. This water will not be withdrawn from the shallow aquifer system and will be allowed to naturally discharge into Toroda Creek.

Phase 3 – After 16 years of mine closure:

Irrigation: Maximum of 125.4 acre-feet per year allowed on the 50 acres granted in the original certificate. Irrigation use is limited to the irrigation season of April 1 to October 31.

Place of use: During mining (Phase 1) water will be used for dust control on lands within Sections 2, 3, 4, and 5, T. 39 N., R. 31 E.W.M., and Sections 31 and 32, T. 40 N., R. 31 E.W.M., and Sections 24 and 25, T. 40 N., R. 30 E.W.M., Okanogan County.

At the completion of mining (Phase 2 and 3) the place of use will revert to the original location within that portion of the N $\frac{1}{2}$ SE $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$ , and SE $\frac{1}{4}$ SW $\frac{1}{4}$  Section 27; and NW $\frac{1}{4}$ NE $\frac{1}{4}$ , NE $\frac{1}{4}$ NW $\frac{1}{4}$ , and SE $\frac{1}{4}$ NW $\frac{1}{4}$  Section 34; BOTH in T. 39 N., R. 31 E.W.M., that lies northwesterly of the easterly branch of Toroda Creek and southeasterly of the county road.

Provisions: Well 2 shall be curtailed if sufficient water is not available from Well 1 to satisfy the right.

*History of water use*

Under the current authorization, 43 ac-ft/yr of consumptive water use is available for dust control; additionally, 82.4 ac-ft/yr is dedicated to instream flow in Toroda Creek. Of the 82.4 ac-ft/yr, 63.6 ac-ft/yr is consumptive and 18.8 ac-ft/yr is non-consumptive. The instream flow use has been exercised continuously since the 2006 Ecology change decision and development of the mine starting at the end of 2007, as that use is required to mitigate for potential mine dewatering impacts to surface water flows in the creek. The water authorized for dust control has been used intermittently since the 2006 change decision in conjunction with other dust control sources that Crown uses, with recent use of about 1 to 4 ac-ft/yr. Prior to the 2006 change the water right was used for irrigation of 50 acres; in that decision and the 2009 temporary change authorization Ecology determined that 125.4 ac-ft/yr had been beneficially used for irrigation, of which 106.6 ac-ft/yr was consumptively used.

*Previous changes*

Previous changes to the subject water right are summarize above in the Background section.

*SEPA*

The board has reviewed the proposed project in its entirety and concluded that the change is not exempt from SEPA.

A portion of this authorization is intended to implement mitigation to offset environmental impacts identified in the Final Supplemental Environmental Impact Statement (FSEIS, 2006) for Buckhorn Mine. Continuing this authorization and adding greater flexibility in the use of instream flows and dust abatement, without increasing consumptive use, is not a substantial change to the proposal that is likely to have significant adverse environmental impacts. Under WAC 197-11-600(3)(b), the Board adopts the original environmental documents and incorporates their requirements herein.

A portion of this proposal is to support mineral exploration and mining on lands in Okanogan County, Washington. Historically, Kinross's exploration plans have included a mix of SEPA-exempt and SEPA-non-exempt explorations. This change authorization is intended to cover both instances, and as a result the Board concluded that this decision is not exempt.

Under WAC 197-11-070, actions are not permissible on a proposal if they would have an adverse environmental impact or limit the choice of reasonable alternatives. The Board's decision in this water right authorization is in compliance with WAC 197-11-070, and the Board's analysis is described below.

First, in this decision, the Board does not authorize any increase in consumptive use over existing authorizations. Absent any consumptive use increase, adverse environmental impacts are improbable.

Second, in this decision, the Board does not authorize any change in source. Absent source change, adverse environmental impacts are improbable.

In both of the instances above, and as a condition of this decision, no existing water right holders or state-held rights will be adversely impacted. No environmental impacts will occur that are not authorized and mitigated as a result of this change.

Third, permit authorizations are permissive, and do not exclude other source options. This term authorization provides for a full range of reasonable alternatives to serve future proposed exploration projects. It merely offers another option that regulatory agencies can consider if SEPA is triggered for an exploration project in the future.

Finally, the change in the Phase 3 authorization from a return solely to irrigation, to now include irrigation and broader mining uses, but within the consumptive use limits of the water right, provides for project flexibility that does not meet either criteria in WAC 197-11-070.

Based on this analysis, the Board concludes that SEPA compliance is satisfied under WAC 197-11-600(3)(b) and WAC 197-11-070.

**The information or conclusions in this section were authored and/or developed by Breean Zimmerman, Joe Morrice and Dan Haller with Aspect Consulting and the Okanogan County Water Conservancy Board.**

#### **COMMENT AND PROTESTS** [See WAC 173-153-130(6)(b)]

Public notice of the application was given in the Omak-Okanogan County Chronical on May 28, 2014, and June 4, 2014. The protest period ended on July 4, 2014.

One protest letter, including the statutory 50 dollar fee, and six comment letters were received during the 30 day protest period. No oral and written comments were received at an open public meeting of the board or other means as designated by the board. The protest letter was received from the Okanogan Highlands Alliance (OHA) of Tonasket, Washington. Comment letters were received from:

- Richard and Kathleen Bryant of Wenatchee, Washington
- Roger, Diane, and Jill Gardinier of Wauconda, Washington
- Douglas DeMers of Riverside, Washington
- Janine Donoho of Oroville, Washington
- Diane MacFarland, no address provided
- Fred Siple of Wauconda, Washington

A summary of protests received and the Board's analysis of those protests is provided in Attachment A.

**The information or conclusions in this section were authored and/or developed by Breean Zimmerman, Joe Morrice and Dan Haller with Aspect Consulting and the Okanogan County Water Conservancy Board.**

#### **INVESTIGATION** [See WAC 173-153-130(6)(c)]

The following information was obtained from a technical reports, research of department records, and conversations with the applicant and/or other interested parties. A site visit was conducted on October 23, 2014, by Okanogan County Water Conservancy Board Members Rod Noel, John Hubbard, and Mark Miller; and applicant representatives Gary Johnson with Kinross Gold Corporation and Breean Zimmerman with Aspect Consulting.

##### *Proposed project plans and specifications*

Under the 2006 change a portion of this water right was dedicated to instream flows in Toroda Creek as mitigation for irrigation season (summer) impacts to creek flows from mine dewatering and water use at the Buckhorn Mountain Mine project. Under the proposed change this purpose of use would be retained with the same quantities and project schedule (82.4 ac-ft/yr of during Phase 1 and 25.1 ac-ft/yr of during Phase 2) as currently authorized, while the remaining portions of this right authorizing dust control use during Phase 1 (43 ac-ft/yr) and irrigation use during Phase 2 and Phase 3 (100.3 and 125.4 ac-ft/yr, respectively) would be changed to authorize dust control, mining, industrial, drilling, and instream flow uses. The place of use for these additional uses would also be expanded to include areas planned by Crown for mineral exploration drilling.

One intent of the requested change is to provide future flexibility in uses of water among the requested purposes to better accommodate the planned drilling and exploration program. Crown may ultimately rely on multiple sources of supply to serve its mining and exploration efforts, depending on hauling distances and permitting of alternate sources. In some cases it may be advantageous to haul water directly from the source well authorized by this right to meet these needs, in other cases it may be more advantageous to haul water from another source and rely on the subject water right (or a portion thereof) as instream flow mitigation. By adding mining, industrial, drilling, and instream flow purposes of use to the existing instream mitigation obligations Crown would gain the flexibility to directly supply the proposed uses or to mitigate for alternate sources, subject to any required additional permitting of those sources.

The wells authorized under the subject water right are completed in sand and gravel alluvium in direct hydraulic continuity with Toroda Creek. As such, withdrawals from the wells have a direct impact on flows in the creek equal to the quantity of water withdrawn, minus any return flows to the creek or local groundwater system. The difference between total withdrawals and return flows is the consumptive use.

Quantities of water planned for the drilling, dust control, mining, and instream flow uses as well as potential future irrigation uses will vary by year. While these quantities cannot be defined with certainty at this time, they can be addressed through

metering submittals. Under the proposed change neither the authorized total use of 125.4 ac-ft/yr nor the associated annual consumptive quantity of 106.6 ac-ft/yr will be allowed to increase. To ensure this, Crown will meter, track, and document where and for what purposes water withdrawn under this request are used. Water used for dust control will largely evaporate from the ground surface, and will be treated as entirely consumptive. Water used for exploration drilling will be largely non-consumptive in the sense that water lost during drilling returns to the groundwater system; however, given the distances of proposed drilling locations from the source well and that drilling will occur primarily in bedrock rather than the Toroda Creek alluvium, it is uncertain when and if exploration drilling water will return to the creek; drilling water use may be treated as entirely consumptive with respect to Toroda Creek or may reflect some return flow considerations. Drilling water use will be treated as entirely consumptive with respect to Toroda Creek, unless subsequent environmental review or permitting documents clarifies the consumptive/non-consumptive fraction for a particular exploration project.

#### *Instream Flows*

There are no instream flow or basin closures established by rule for Toroda Creek, although applications for new water rights lacking mitigation have been denied in the past based on recommendations from the Washington Department of Fish and Wildlife (WDFW) that remaining flows are necessary to maintain aquatic resources. Of particular concern is the irrigation season when some reaches of Toroda Creek tend to go dry during summer low flow periods, in part as a response to irrigation diversions and groundwater pumping. Under the proposed change the period of use for non-irrigation uses would be changed from the irrigation season (April 1 through October 31) to year-round. In comments on the 2006 change (CG4-CCV1-4P200), WDFW recognized there would be an incremental improvement in flows during the irrigation season, although the benefits would be countered somewhat by expanded use outside the irrigation season; however, fish sensitivity and other out-of-stream water uses are less outside the irrigation season resulting in an overall net benefit to surface water flows in the Toroda Creek drainage.

#### *Other water rights appurtenant to the property (if applicable)*

Below are other water rights held by Kinross with place of use overlapping with the subject water right.

- CG4-34904P@1 (Mine Dewatering). Water Right Permit No. G4-34904P, approved by Ecology on November 21, 2007, and change application CG4-34904P, approved by Ecology on August 30, 2013, and change application CG4-34904P@1 (OKAN-12-01), approved by Okanogan County Conservancy Board on June 5, 2013, and approved by Ecology on August 23, 2013, authorizes a groundwater withdrawal for mining and industrial use from ten wells and a network of underground sumps. Use for streamflow augmentation is also authorized at the end of mining and associated mine dewatering. The Qi and Qa authorized for beneficial use are 100 gpm and 12.6 acre-ft/yr during mining, and 100 gpm and 3.34 acre-ft/yr following the end of mining.
- G4-34905 (Domestic). This application, approved by Ecology on October 25, 2007, authorizes a groundwater withdrawal for dust control and domestic use for site employees from a single well. The authorized Qi is 5 gpm. The authorized Qa is 5.2 acre-ft/yr, of which 2.8 acre-ft/yr is for domestic use and 2.4 acre-ft/yr is for dust control.
- CS4-34999P (Stormwater). Water right Permit No. S4-34999P, approved by Ecology on October 24, 2007, and water right change application CS4-34999P (OKAN-12-02), approved by Okanogan County Conservancy Board on June 5, 2013, and approved by Ecology on August 23, 2013, authorizes a surface water diversion (collection of stormwater) for industrial and mining use, to augment mine operational needs not met by the quantities authorized under Water Right Permit No. G4-34904P. Authorized Qi and Qa are 50 gpm (0.111 cfs) and 12.6 acre-ft/yr. The Qa is non-additive to the Qa authorized under Water Right Permit No. G4-34904P. This water comes from collection of stormwater drainage from ore and development rock stockpiles and is stored temporarily in the surge pond reservoir under Reservoir Permit No. R4-35093P.
- R4-35093 (Reservoir). This application, approved by Ecology on October 24, 2007, authorizes a storage facility (surge pond) for water derived from mine dewatering and stormwater under Water Right Permit Nos. G4-34904P and S4-34999P. A maximum of 3.0 acre-feet of water for beneficial use would be stored by the facility at any given point in time.

#### *Public Interest (groundwater only)*

The proposed transfer is subject to RCW 90.44.100 and therefore, cannot be detrimental to the public interest, including impacts on any watershed planning activities. The proposed project creates additional instream flow authority, provides greater flexibility for out-of-stream operations, and does not lead to any substantial adverse environmental impacts beyond those already covered in existing environmental documents, or those that may limit exploration options in the future. The change in season of use is a transfer that reduces withdrawals from the time when competition for water is highest and instream flows are lowest. These attributes are all in the public interest. No detriment to the public interest was identified during the investigation for this application for change.

#### *Relinquishment and Defacto Changes*

In investigating the Water Use History for this water right, the Board determined that full use for irrigation had occurred consistent with Ecology's change authorization in 2006 and subsequent 2009 temporary change authorization. Thereafter, the right was used in its entirety for the instream flow portion, and less that the full authorization for dust abatement in Phase 1 was used. Crown manages this right for both purposes, and considers the out-of-stream and consumptive use limits to be ceilings above which no withdrawals are permissible. However, because instream flow is authorized under the current authorization, they have voluntarily exceeded this purpose of use when their dust abatement needs have been diminished by weather, operations, or other dust abatement sources. Although leaving more than 82.4 ac-ft/yr instream is in excess of the authorized quantity for this discrete purpose, this could be considered a defacto change, which is permissible under Ecology's Policy 1280.

The Board also considered whether two exemptions to relinquishment provided in RCW 90.14.140 apply to this water right, specifically:

- RCW 90.14.140(2)(c) If such right is claimed for a determined future development to take place ... within fifteen years of ... the most recent beneficial use of the water right.
- RCW 90.14.140(2)(b) If such right is used for a standby or reserve water supply to be used in time of drought or other low flow period so long as withdrawal or diversion facilities are maintained in good operating condition for the use of such reserve or standby water supply; and

#### Determined Future Development (DFD)

The DFD exemption to relinquishment applies to this water right and is embodied in the previous change authorization. In order for the DFD exemption to apply the water right holder must have a firm and definitive plan for future use of the water fixed prior to the end of the standard five year period of non-use that would trigger relinquishment. Additionally the water right holder must take some affirmative steps toward realizing the development plan with 15 years of the last beneficial use.

Kinross, and its predecessors, have held long-term interests in the subject water right with the intent of applying it to mineral exploration and mine development in northeast Okanogan County. BMGC first leased this right in 1992, and amending the lease in 1997, with intent to support mine development activities in a joint venture with Crown. BMGC pursued development of the Crown Jewel Mine, an earlier open pit version of the Buckhorn Mine, but that project was stopped in 2000 after successful appeals of environmental permits. BMGC withdrew from the joint venture and 100 percent of the project ownership reverted to Crown. In 2003 Kinross entered into an agreement to acquire Crown and the Buckhorn Mountain Mine project, including the water right lease option. This acquisition was completed in August 2006. In January 2014 the water right lease agreement was amended again, extending the lease term to April 1, 2028. Water was used annually for irrigation at the property from before the 1992 lease option until initial development of the Buckhorn Mountain Mine starting in late 2007. Ecology determined the extent of the right at that time in its 2006 change authorization and again in their 2009 temporary change authorization.

With development and ownership of the Kettle River Mill, Kinross has a significant investment in the area, and is continuously planning for additional mineral exploration and mine development to supply ore and keep the mill operating. In line with their ongoing exploration and mine development plans, Kinross is continually planning for water supply to support these operations. This is evidenced in part by the proposed Buckhorn Mountain Exploration Project, a separate and distinct project from the current Buckhorn Mine. In 2010 Echo Bay Exploration (EBE), a subsidiary of Kinross, filed a Plan of Operations (PoO) and Reclamation Permit Application with the U.S. Forest Service (USFS), Bureau of Reclamation (BoR), and Washington State Department of Natural Resources (DNR) describing proposed mineral exploration drilling on public and private lands throughout the Buckhorn Mountain area. The full exploration project proposed for public lands has since been cancelled, but Crown needs access to water rights authorizing exploration drilling, dust control, and mining uses in the future to continue to support its long-term exploration plans. Kinross has also pursued several small exploration options in Okanogan County including near the existing K2 Mine, Bodie Mine, and other public and private properties.

Kinross fixed a plan for future use of the subject water right to support proposed mineral exploration, dust control, mining, and mitigation use in 2006. Key evidence of fixing include their acquisition of the water right and successfully transferring it to new uses in an approved Ecology change application. A provision of the 2006 change authorization was restoration of 50 acres in Phase 3. Kinross will ensure that 50 acres is irrigated for at least one year in Phase 3 to demonstrate compliance with the original change authorization and the DFD. This change authorization will provide Kinross with greater flexibility to accomplish its overall mining plans in the area.

In pursuit of its DFD, Crown has taken the following actions to implement its plan:

1. Spent millions of dollars on exploration activities and active mining operations.
2. Re-negotiated the long-term lease to allow for continued use of the water right.
3. Filed the subject change application to better match the

#### Standby / Reserve

Kinross holds three other water rights (G4-34904, G4-34905, and S4-34999) for the Buckhorn Mine project authorizing dust control use. The mine water rights have points of diversion/withdrawal at the mine site, and when supply from these sources is sufficient Kinross preferentially exercises these rights. Mine dewatering and stormwater management have produced more than sufficient supply, allowing Kinross to reduce reliance on the subject water right and treat it as a standby supply. Additionally, Crown has a Fugitive Dust Control Plan last updated in July 2013 and required under Ecology Air Quality Permit 06AQ-C033, which helps regulate the appropriate quantity, duration, and frequency of dust abatement. Finally, Crown periodically has used magnesium chloride as another dust abatement tool which can reduce the need for water from this water right. However, that use has potential water quality impacts that may create a need for a return to greater reliance on dust abatement from this water right in the future. These operations have had the added benefit of leaving more water instream, especially during the irrigation season.

#### Annual Consumptive Quantity (ACQ)

The proposed change would add purposes of use to the water right. Under RCW 90.03.380(1) adding new purpose of use may be permitted if such change results in no increase in the annual consumptive quantity (ACQ) of water used under the water right. The ACQ is defined as annual consumptive use (total use minus return flows) averaged over the two years of greatest use within the most recent five-year period of continuous beneficial use of the water right. However, under RCW 90.03.615, when evaluating ACQ, if within the most recent 5 year period a non-use of water can be excused from relinquishment under RCW 90.14.140, the period of evaluation is the most recent five-year period of continuous beneficial use preceding the date where the excuse for nonuse under RCW 90.14.140 was established.

The Board concludes that relinquishment exemptions excuse partial non-use for the period from 2007 to present. For the purposes of calculating ACQ, the period of evaluation reverts to the most recent five-year period of continuous beneficial use preceding the date where the excuse for nonuse was established. In both the 2006 change decision and the 2009 temporary change authorization Ecology evaluated beneficial irrigation use, including consumptive use, for the period in question. That

evaluation determined that 125.4 ac-ft/yr of water was used to irrigate 50 acres of alfalfa, with an annual consumptive quantity of 106.6 ac-ft/yr. The Board adopts these values for the total and consumptive limits of the water right.

*Tentative Determination*

In order to make a water right change decision, the Board must make a tentative determination on the validity and extent of the right. The Board has made the tentative determination as displayed upon the first page of this report. There are several circumstances that can cause the board's tentative determination to differ from the stated extent of the water right within water right documentation. Water right documents attempt to define a maximum limitation to a water right, rather than the actual extent to which a water right has been developed and maintained through historic beneficial use. Additionally, except for a sufficient cause pursuant to RCW 90.14.140, water rights, in whole or in part, not put to a beneficial use for five consecutive years since 1967 may be subject to relinquishment under Chapter 90.14.130 through 90.14.180 RCW. Water rights may additionally be lost through abandonment. The Board's tentative determination was based upon the following findings:

1. The subject water right has not been put to full beneficial use since 2007, but qualifies for statutory exemptions to relinquishment.
2. Because the water right change proposes to add a purpose of use the ACQ test applies.
3. Under RCW 90.03.615, when evaluating ACQ, if within the most recent five year period a non-use of water can be excused from relinquishment under RCW 90.14.140, the period of evaluation is the most recent five-year period of continuous beneficial use preceding the date where the excuse for nonuse under RCW 90.14.140 was established.
4. The applicable five year period for evaluating ACQ is the final five years of irrigation before the mine development began in late 2007.
5. In the 2006 and 2009 change decisions Ecology evaluated total and consumptive use for this period, tentatively determining that 125.4 ac-ft/yr of water was used to irrigate 50 acres of alfalfa, with an annual consumptive quantity of 106.6 ac-ft/yr. The Board concurs that these quantities are appropriate for this change.

**The information or conclusions in this section were authored and/or developed by Breean Zimmerman, Joe Morrice and Dan Haller with Aspect Consulting and the Okanogan County Water Conservancy Board.**

**CONCLUSIONS** [See WAC 173-153-130(6)(d)]

*Tentative determination (validity and extent of the right)*

Please refer to page 2 and 3 of this report.

*Relinquishment or abandonment concerns*

There is no relinquishment or abandonment concerns. Although there has been a greater than five year period of partial non-use, the non-use qualifies for statutory exemptions to relinquishment.

*Consideration of comments and protests*

The Board has provided evaluation and response to protests and comments in Attachment A, including concerns about impairment, enlargement, and availability of water. The comments seem to largely misunderstand that the proposal is a change to an existing, valid water right and will not result in increased total or consumptive use, or result in impairment of existing rights.

*Impairment*

Adding new mining and industrial purposes of use and increasing the place of use will not impair existing water rights, as no change in the quantity of the previously authorized total or consumptive use is proposed. Existing mitigation obligations (instream flow uses) would be maintained, and when combined with the proposed new water uses would remain within the established annual consumptive quantity of the subject water right. Some water currently restricted to irrigation season use would instead be used year-round, but this would have the overall effect of reducing irrigation season uses, when demands from other water right holders on the Toroda Creek surface water and groundwater system are highest.

*Public Interest*

The proposed uses is not detrimental to the public interest.

**DECISION** [See WAC 173-153-130(6)(e)]

Based on the above investigation and conclusions, I recommend the request for change to CG4-CCV1-4P200 be authorized, to include the additional place of use to include potential exploratory drilling locations, and add mining, industrial, and drilling, purposes of use, extend season of use to year-round, extend the development schedule through 2035 and within the limitations listed below and subject to the provisions.

**Purpose of Use and Authorized Quantities**

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial.

Phase 1 – Dust control, mining, industrial, drilling, instream flow:

Dust control, mining, industrial, drilling, instream flow: 43 acre-ft/yr, year-round.

Instream flow (not diverted): 82.4 acre-ft/yr as mitigation for Buckhorn Mountain Mine water rights, April 1 to October 31.

Phase 2 – Dust control, mining, industrial, drilling, instream flow, irrigation:

Dust control, mining, industrial, drilling, instream flow, irrigation: 100.3 acre-ft/yr, year-round for non-irrigation uses. April 1 to October 31 for irrigation of 40 acres.

Instream flow (not diverted): 25.1 acre-ft/yr as mitigation for Buckhorn Mountain Mine water rights, April 1 to October 31.

Phase 3 – Dust Control, mining, industrial, drilling, instream flow, and irrigation: 125.4 acre-ft/yr, year-round for non-irrigation uses. April 1 to October 31 for the irrigation of 50 acres.

**Points of Withdrawal**

Well 1 – SW¼SE¼, Section 27, T. 39 N., R. 30 E.W.M.

Well 2 – SE¼NW¼, Section 34, T. 39 N., R. 30 E.W.M.

**Place of Use – as described on page 2 of this report**

Dust control, mining, and industrial uses during all phases:

The NW¼NW¼ of Section 1; the NE¼NE¼, SW¼SW¼ and S½N½ of Section 2, except for the SE¼NE¼; the E½NW¼, NE¼ and SE¼SE¼ of Section 3; the NW¼, E½E½, SW¼NE¼ and SW¼SE¼ of Section 12; the N½NE¼ and W½NW¼ in Section 13; the N½SW¼ and SW¼SW¼ of Section 14; the N½SE¼ and SE¼SE¼ of Section 15; Section 16, except for the NE¼NE¼; the E¼E½ of Section 17; the N½NW¼ of Section 21; the N½NW¼, NE¼, W½SE¼, and NE¼SW¼ of Section 22; the W½NW¼ of Section 23; and the SE¼NE¼ of Section 28, all located in T. 38 N., R. 31 E.W.M.; and

Sections 1 through 4 and 11 in T. 39 N., R. 30 E.W.M.; and

Sections 2, 3, 4, and 5; the W½ of Section 26; the S½ of Section 27; Section 34; the W½, SE¼SE¼, NE¼SE¼, and SE¼NE¼ of Section 35; and the W½W½ of Section 36, except for the N½NW¼NW¼, all located in T. 39 N., R. 31 E.W.M.; and

Sections 13, 14, 24, 25, 35, and 36 in T. 40 N., R. 30 E.W.M.; and

Sections 31 and 32, T. 40 N., R. 31 E.W.M., Okanogan County.

Irrigation uses during Phase 2 and 3 will revert to the original location within that portion of the N½SE¼, SW¼SE¼, and SE¼SW¼ Section 27; and NW¼NE¼, NE¼NW¼, and SE¼NW¼ Section 34; BOTH in T. 39 N., R. 31 E.W.M., that lies northwesterly of the easterly branch of Toroda Creek and southeasterly of the county road.

**The information or conclusions in this section were authored and/or developed by Breean Zimmerman, Joe Morrice and Dan Haller with Aspect Consulting and the Okanogan County Water Conservancy Board.**

**PROVISIONS** [See WAC 173-153-130(6)(f)]

1. The amount of water granted is a maximum limit that shall not be exceeded and the water user shall be entitled only to that amount of water within the specified limit that is beneficially used and required.
2. Water use shall occur within the following limitations and defined periods:

**Phase 1 – Dust control, mining, industrial, drilling, instream flow:**

**Dust control, mining, industrial, drilling, instream flow:** 43 acre-ft/y, year-round.

**Instream flow (not diverted):** 82.4 acre-ft/yr as mitigation for Buckhorn Mountain Mine water rights, April 1 to October 31.

**Phase 2 – Dust control, mining, industrial, drilling, instream flow, irrigation:**

**Dust control, mining, industrial, drilling, instream flow, irrigation:** 100.3 acre-ft/yr, year-round for non-irrigation uses. April 1 to October 31 for irrigation of 40 acres.

**Instream flow (not diverted):** 25.1 acre-ft/yr as mitigation for Buckhorn Mountain Mine water rights, April 1 to October 31.

**Phase 3 – Dust Control, mining, industrial, drilling, instream flow, and irrigation:** 125.4 acre-ft/yr, year-round for non-irrigation uses. April 1 to October 31 for the irrigation of 50 acres.

3. Kinross shall provide notice to Ecology's Water Resources Program at least six months prior to implementation of any irrigation under Phases 2 and 3 of the planned water use under this change authorization, and receive written concurrence from Ecology before irrigation is implemented. The notification shall include:
  - The date that irrigation is anticipated to commence.
  - The number of acres that will be irrigated. The number of acres irrigated shall not exceed 40 acres under Phase 2 and 50 acres under Phase 3.

4. An approved measuring device shall be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", Chapter 173-173 WAC.
5. Water use data shall be recorded weekly. In accordance with the Hydrologic Monitoring Plan submitted by the applicant, photographs shall also be taken during the irrigation season documenting irrigated and non-irrigated acreage at the site.
6. The maximum rate of diversion/withdrawal and the annual total volume shall be submitted to Ecology by January 31st of each calendar year. The following information shall be included with each submittal of water use data: (1) owner; (2) contact name if different; (3) mailing address; (4) daytime phone number; (5) WRIA; (6) Permit/Certificate No.; (7) source name; (8) annual quantity used including units of measurement; (9) maximum rate of diversion, including units of measurement, (10) weekly meter readings including units of measurement, (11) peak monthly flow including units of measurement, (12) purpose of use, and (13) well tag number. In the future, Ecology may require additional parameters to be reported or to be reported on a more frequent basis. Ecology prefers web based data entry, but does accept hard copies. Ecology will provide forms and electronic data entry information.
7. Chapter 173-173 WAC describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modification to some of the requirements. Installation, operation, and maintenance requirements are enclosed as a document entitled "Water Measurement Device Installation and Operation Requirements".
8. 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 conditions, and to inspect at reasonable times any measuring device used to meet the above conditions.
9. Installation and maintenance of an access port as described in Chapter 173-600 is required. An airline and gauge may be installed in addition to the access port.
10. Any approved points of withdrawal under this water right that are no longer planned to be used shall be properly decommissioned within a reasonable amount of time.
11. If it can be shown that the requested change has a detrimental effect on existing rights, it shall be the responsibility of the water right holder to mitigate for this impact and/or alter or cease withdrawal of water.
12. If and when there fails to exist sufficient volume of water to satisfy the right from Well 1 the use of Well 2 shall be curtailed.
13. Continued use of water under this change is conditioned upon compliance with monitoring, reporting, and adaptive management of water resources described in the most current *Aquatic Resources Mitigation Plan*, *Hydrologic Monitoring Plan*, *Adaptive Management Plan*, and requirements of the *Metals and Mining Operations Environmental Protection and Performance Security Bond* under Chapter 78.56 RCW.

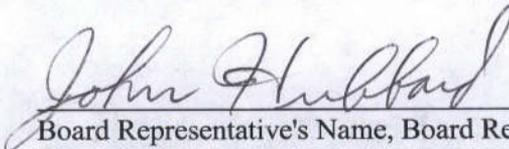
*Construction Schedule*

The well and water truck filling station are currently in place and in use. Refer to the Board's Decision on Page 3 of this report and the provisions section for the project schedule.

**The information or conclusions in this section were authored and/or developed by Breean Zimmerman, Joe Morrice and Dan Haller with Aspect Consulting and the Okanogan County Water Conservancy Board.**

The undersigned board commissioner certifies that he/she understands the board is responsible "to ensure that all relevant issues identified during its evaluation of the application, or which are raised by any commenting party during the board's evaluation process, are thoroughly evaluated and discussed in the board's deliberations. These discussions must be fully documented in the report of examination." [WAC 173-153-130(5)] The undersigned therefore, certifies that he/she, having reviewed the report of examination, knows and understands the content of this report and concurs with the report's conclusions.

Signed at City, Washington  
This Date day of Month, Year



Board Representative's Name, Board Representative  
Okanogan Water Conservancy Board

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