For Ecology Use
(Date Stamp)

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DEPARTMENT OF ECOLOGY
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DEPARTMENT OF ECOLOGY
State of Washington

Water Resources Program
Application for a Water Right Permit

☐ SURFACE WATER ☒ GROUND WATER ☒ PERMANENT

☐ TEMPORARY ☐ SHORT TERM ☐ DROUGHT

Follow the attached instructions. Attach additional sheets as necessary.

***A NON-REFUNDABLE MINIMUM FEE OF $50.00 MUST ACCOMPANY THIS APPLICATION.**

Section 1. APPLICANT

Applicant/Business Name: **Avista Corporation**	Phone No: **(509) 495-2571**	Other No:
Address: **1411 East Mission, Post Office Box 3727, MSC-1**		
City: **Spokane**	State: **WA**	Zip: **99220-3727**
Email Address (optional): **linda.kiefer@avistacorp.com**		

Contact Name (if different from above): **Linda M. Kiefer**	Phone No: **(509) 495-2571**	Other No: **(509) 690-7333**
Relationship to Applicant: **Environmental Resource Specialist, Dept. of Environmental Affairs – Avista Corp.**		
Address: **1411 East Mission, Post Office Box 3727, MSC-1**		
City: **Spokane**	State: **WA**	Zip: **99220-3727**
Email Address (optional): **linda.kiefer@avistacorp.com**		

Legal Land Owner or Part Owner Name of the Proposed Place of Use: **Avista – Kettle Falls Generating Station**	Phone No: **(509) 495-2571**	Other No:
Address: **1411 East Mission, Post Office Box 3727, MSC-1**		
City: **Spokane**	State: **WA**	Zip: **99220-3727**
Email Address (optional): **linda.kiefer@avistacorp.com**		

Section 2. STATEMENT OF INTENT

Briefly describe the purpose of your proposed project:

The purpose of this water right application is to obtain the necessary permit for the development of a sustainable and continuous water supply for Avista's Kettle Falls Generating Station (KFGS). The source of water would be from **a new ground water supply system** located on Avista property adjacent to the KFGS plant that is **in hydraulic continuity with Franklin D. Roosevelt Lake (Columbia River) water.**

Located approximately 1200' from the shore of Roosevelt Lake and approximately 2 miles northwest of the City of Kettle Falls, the KFGS plant was constructed in the early 1980s. During the construction phase,

KB AMEND to 800 GPM
650gpm
$144.44

For Ecology Use	APPLICATION NO: G3-30632 SEPA: Exempt/Not Exempt Fee Paid: 178.25 Check No: 801723 ECY Coding: 001-001-WR1-0285-000011
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Avista helped the City of Kettle Falls develop and fund a well field south of the town in the Colville River aquifer, to provide water necessary for both the KFGS plant operations and the City's municipal water needs. The City approached Avista (at that time Washington Water Power (WWP)) on a joint development of the City's groundwater system to defray some of the costs the City would incur. Avista (WWP) paid for a significant portion of the development of the City's well field and in return obtained a long-term water supply agreement.

Prior to the development of the City's well field, WWP was pursuing a Lake Roosevelt intake and had obtained the necessary water right permit (S3-26381P) for 3.95 cfs flow rate with a volume of 929 AF. The water right had a priority date of 9/24/1979. However, when WWP agreed to help develop the City's well field, WWP ceased to develop permit S3-26381P, and therefore the water right permit was cancelled by Ecology in 1982.

Since its construction, the KFGS plant has obtained water from the City's potable water distribution system under a 30-year water supply agreement between Avista and the City. For over 23 years, the City's water supply system and associated ground water rights were sufficient to meet the needs of both the City and the KFGS plant operations. However, with recent increased population growth, the City had to implement a building moratorium due to a limitation in the instantaneous quantity of the City's ground water rights for that well system. Avista is working together with the City under a cooperative agreement to develop a new water supply for the KFGS plant that will help resolve the City's limited instantaneous water supply concerns and also to ensure long-term reliability of water supply for the KFGS plant.

Avista is applying for this new water right specific for the KFGS plant operations. Once the application is approved and the KFGS water system developed, the KFGS facility will be taken off of the City's ground water system, which will greatly reduce the amount of potable water being used for industrial use and make that water available for other critical domestic uses within the City's water supply service area.

Avista's new water supply system will result in **an environmental improvement/benefit** to the low flows of the Colville River Watershed. By obtaining industrial water supply from Lake Roosevelt waters instead of the Colville River Aquifer, Avista's proposed new well system will allow 620+ gpm of potable water supply to remain for instream and out-of-stream uses within the Colville River Watershed, which is currently under an instream flow closure (1977) due to low flow issues. In addition, the 20 % non-consumptive water supply (approximately 130 gpm) that is currently being taken from the Colville Watershed and released back into Lake Roosevelt will be changed so that the intake and outflow will be from the same body of water, Lake Roosevelt.

Anticipated length of time to complete your project: 2 – 3 years, dependant on the timing of obtaining necessary permitting for development. Project completion date is estimated to be December 31, 2013.

Water Use List all purposes for which water will be applied to a beneficial use and list quantity required for each.

Purpose(s) of Use	Rate (check one box only) ☐ Cubic Feet per Second (CFS) ☒ Gallons per Minute (GPM)	Acre-Feet per Year (AF/YR) (If known)	Period of Use (Continuously or Seasonal)
Commercial/Industrial	**520 GPM (consumptive - 80%)** **130 GPM (non-consumptive: 20%)**	**750AF/YR**	**Continuously**
Fire Protection	**(As needed)**		**Continuously**
TOTAL:	**~~650~~ GPM**	**750AF/YR**	

AMEND to 800 GPM
PER E-MAIL. L. Kistler 3/26/11 KB

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Short Term/Temporary Water Use

Is this a request for a short term project (less than four months and non-recurring)? ☐ YES ☒ NO

Is this request for a temporary permit? ☐YES ☒ NO

If yes to either question above, indicate the dates that the water will be needed:

FROM: _____/_____/_____ TO: _____/_____/_____

Section 3. POINT OF DIVERSION OR WITHDRAWAL

(Complete A or B, and C below)

A.) If Surface Water Source	B.) If Ground Water Source
☐ Spring ☐ Creek ☐ River ☐ Lake ☐ Other:_____ Source Name:_____ Tributary to:_____ Number of proposed diversion points:_____ Do you have an existing diversion? ☐ YES ☐ NO	☒ Well(s) ☐ Other: **Up to 6 wells in hydraulic continuity with Franklin D. Roosevelt Lake (Columbia River).** Well diameter & depth: **Up to 24" diameter X 350' depth.** Number of proposed points of withdrawal: 6 wells Do you have an existing well? ☒ YES ☐ NO If available, attach Water Well Report and pump test. Well Tag ID No.**BBL793 (See attached 2010 well log and pump test.)**

C.) Point of Diversion/Withdrawal – Legal Descriptions

Parcel No.	¼	¼	Section	Township	Range	County
8000997	**SW**	**NE**	**14**	**36**	**37**	**Stevens**
Lot(s)	Block(s)		Subdivision			

If known, enter the distances in feet from the point of diversion or withdrawal to the nearest section corner:

_____ Feet (☐ North/☐ South) and _____feet (☐ East/☐ West)

from the (☐NW ☐SW ☐NE ☐SE ☐ ____) corner of Section_____.

Parcel No.	¼	¼	Section	Township	Range	County
1701700	**NW**	**SE**	**14**	**36**	**37**	**Stevens**
Lot(s)	Block(s)		Subdivision			

If known, enter the distances in feet from the point of diversion or withdrawal to the nearest section corner:

_____feet (☐ North/☐ South) and _____feet (☐ East/☐ West)

from the (☐NW ☐SW ☐NE ☐SE ☐____) corner of Section_____

NOTE: If more than two points of diversion/withdrawal attach additional information on a separate sheet of paper.

Do you own the land on which the proposed point of diversion/withdrawal is located? ☒ YES ☐ NO
If no, do you have legal authority to make this application for use of another's land? ☐ YES ☐ NO
Provide the owner name(s), address, and phone number:_____

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Section 4. PLACE OF USE

Attach a copy of the legal description of the property (on which the water will be used) taken from a real estate contract, property deed or title insurance policy, or copy it carefully in the space below.

Avista Parcel No. 8000997:
All that part of the NE1/4 of Section 14, Township 36, North, Range 37, East, in W.M., in Stevens County, Washington, being further described as follows: Beginning at the East ¼ corner of said Section 14, said point being marked with a 1-inch pipe; thence along the South line of the NE1/4 of said Section 14, S 87°47'49"W a distance of 402.32 feet to a point on the westerly right of way line of U.S. Highway No. 395, and the true Point of Beginning of the tract to be described: thence along the westerly right of way of said Highway No. 395 the following five courses and distances: N 34°21'43"W 1138.06 feet; N 45°40'19"W 101.98 feet; N 34°21'43"W 700.00 feet; N 17°39'46"W 104.40 feet; N 34°21'43"W 211.28 feet; thence S 55°38'17" W a distance of 206.31 feet to a point on the easterly right of way line of the Burlington Northern Railroad; thence along the easterly right of way line of said Railroad the following three courses and distances: S 13°33'30"W 564.00 feet; N 76°26'30"W 30.00 feet; S 13°33'30"W 906.16 feet; to the beginning of the tangent curve concave to the left of 2814.70 feet radius; thence continuing along said right of way line along said curve a distance of 396.16 feet to a point on the South line of the NE1/4 of said Section 14; thence N 87°57'49"E a distance of 1872.13 feet to the true Point of Beginning.

Avista Parcel No. 1701700:
That part of the NW1/4 of the SE1/4 of Section 14, Township 36 North, Range 37East, W.M., in Stevens County, Washington, lying East of the right of way for the Great Northern Railway Company.

Avista Parcel No. 1701400:
The N1/2 of the NE1/4 of the SE1/4, the SW1/4 of the NE1/4 of the SE1/4 and the N1/2 of the SE1/4 of the NE1/4 of the SE1/4 of Section 14, Township 36 North, Range 37 East, W.M., in Stevens County, Washington, EXCEPT right of way for Primary State Highway No. 3, Meyers Falls to Kettle Falls bridge, conveyed to Stat of Washington, by deed recorded in Volume 104 of Deeds, page 538, and deed recorded under auditor's file No. 499697. EXCEPT that portion of the N1/2NE1/4SE1/4 lying North and East of Primary State Highway No. 3.

¼	¼	Section	Twp.	Range	County	Parcel No.
		14	36N	37E	Stevens County	8000997, 1701700, & 1701400

Do you own all the lands on which the proposed place of use is located? ☒ YES ☐ NO.

If no, do you have legal authority to make this application for use of another's land? ☐ YES ☐ NO
Provide owner name(s), address, and phone number:_____

Are there any other water rights or claims associated with this property or water system? ☐ YES ☒ NO

If yes, provide the water right and/or claim numbers:_____

Attach a map of your project showing the point of diversion/withdrawal and place of use. If platted property, be sure to include a complete copy of the plat map.

Section 5. WATER SYSTEM DESCRIPTION

Describe your proposed water system (include type and size of devices used to divert or withdraw water from source):

The proposed water system will likely include a series of production wells at described location to a depth of approximately 300'- 350', such that the screened area of the wells are in contact with gravel seams running between the wells and Franklin D. Roosevelt Lake (Columbia River). The proposed system will include either submersible turbine pump(s) or turbine shaft pump(s) with surface-mounted motor (s) on the wells. The capacity of the pump system is expected to be approximately 800+ gpm with a head of approximately 400 feet. Power for the pump(s) will be derived from an adjacent Avista 13.8 kV distribution line running along Peachcrest Road. Pump effluent will be piped via a 6"+ NPS steel pipe from the well to the applicant's adjacent KFGS facility where it will be tied into the existing plant water distribution system.

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The test well for this system was drilled in September 2010 (see attached well log with this application). On October 5 – 6, 2010, step rate and constant rate pumping tests were completed on the test well (for results, see attached November 15, 2010 Aspect Consulting hydrologic technical memo: Test Well BBL793 Installation and Pump Test, Avista Corporation, Kettle Falls Generating Station. Static (non-pumping) depth to water measurements were collected from the test well before and after the pumping test, and then weekly starting October 18th through November 29, 2010 (see attached December 15, 2010 Table 3 – Test Well TW-1 Water Level Monitoring Data.) A complete licensed hydrologic report along with water system plan recommendations will be submitted to Avista by the end of March 2011, and will be available for use upon request for processing this application.

Section 6. DOMESTIC WATER SUPPLY SYSTEM INFORMATION

(Complete A or B, and C below) ***(NOT APPLICABLE)***

A.) Domestic Water Systems only	**B.) Municipal Water Systems only** *(defined under RCW 90.03.015)*
Projected number of connections to be served: _____	Present population to be served water: _____
Type of connections: _____ *(e.g., home, recreational cabin)*	Estimate future population to be served: _____ (20 year projection)

C.) Water System Planning

Do you have a Water System Plan approved by the Washington State Department of Health, Drinking Water Division? ☐ YES ☐ NO

If yes, date plan was approved _____/_____/_____ Water System Number: _____

Name of water system: _____

Are you within the service area of an existing water system? ☒ YES ☐ NO

If yes, explain why you are unable to connect or stay connected to the system:

As noted in Section 2 - Statement of Intent, the KFGS plant's water supply comes from the City of Kettle Falls' potable groundwater distribution system, which source is from a well field south of town in the Colville River Aquifer. Avista (previously WWP) helped develop and fund the City's well field at the time the KFGS plant was being built (1983) and in return, WWP obtained a 30-year water supply agreement. This water supply contract with the City ends in 2012. Since the City is currently short of instantaneous water supply at the City's permitted ground water supply system, Avista is working cooperatively with the City to develop the new water supply system on Avista's property. Once permitting and development is complete, Avista's new industrial water supply will provide immediate relief to the City's shortage of permitted potable groundwater and to provide a long-term reliable water source for the KFGS plant.

Section 7. IRRIGATION/STOCKWATER/OTHER FARM USES

Irrigation ***(NOT APPLICABLE)***

Stockwater ***(NOT APPLICABLE)***

Other Proposed Farm Uses
Describe all proposed uses: ***(NOT APPLICABLE)***

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Section 8. OTHER WATER USES

Hydropower *(NOT APPLICABLE)*

Indicate total feet of head _____ and proposed capacity in kilowatts:_____

Describe works:_____

Indicate all uses to which power is to be applied:_____

FERC License No:

Mining *(NOT APPLICABLE)*
Describe use, method of supplying and utilizing water:

Industrial Use:

Industrial water supply is the primary water use needed for the KFGS plant from the described well supply system in continuity with Lake Roosevelt (Columbia River), where 80% of the supply will be consumed in continuous plant operations and 20% (non-consumptive) will be returned to Lake Roosevelt.

- Amount requested: 650 GPM, 750AF/YR
- 80% consumptive (520 GPM), and 20% non-consumptive (130 GPM)

(800 GPM)
8/26/11 KB

Fire Protection:

Emergency water supply for fire protection purposes is the secondary water use needed for the KFGS plant, to be used only on an **'as needed basis'**. The fire protection water will be supplied to plant hydrants placed strategically throughout the plant site.

Section 9. WATER STORAGE *(NOT APPLICABLE)*

Will you be using a dam, dike, or other structure to retain or store water? ☐ YES ☒ NO

Are you proposing to store more than 10 acre-feet of water? ☐ YES ☒ NO

Will the water depth be 10 feet or more? ☐ YES ☒ NO

If you answered yes to any of the above questions, please describe:_____

NOTE: If you will be storing 10 acre-feet or more of water and/or if the water depth will be 10 feet or more at the deepest point and some portion of the storage will be above grade, you must also complete an Application for Permit to Construct a Reservoir and a Dam Construction Permit and Application.

Section 10. DRIVING DIRECTIONS

Provide detailed driving directions to the project site:

From Spokane, head north on Hwy 395 approximately 70 miles. Go through the City of Kettle Falls, continuing northwest on Hwy 395. Approximately 2,500 feet before you reach Lake Roosevelt, turn left into the entrance of Avista's Kettle Falls Generating Station plant. Stop at the guard shack, and ask the guard to contact the main office to request a guide to the test well site.

Site Address: Kettle Falls Generating Station – Avista Corp.
1151 Hwy. 395N,
Kettle Falls, WA 99141-0609

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Section 11. REQUIRED SIGNATURES

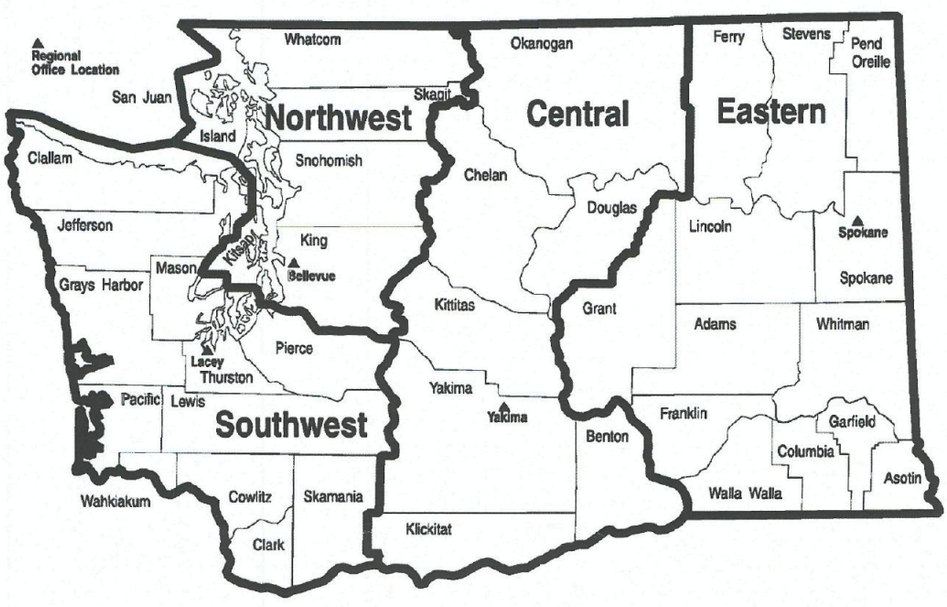
I certify that the information provided in this application is true and accurate to the best of my knowledge. I understand that in order to process my application, I grant staff from the Department of Ecology access to the site for inspection and monitoring purposes. Even though the employees of the Department of Ecology may have assisted me in the preparation of the above application, all responsibility for the accuracy of the information rests with me, the applicant.

Steve Fry, Manager, Hydro Compliance Print Name (Applicant or authorized representative)	Steve Fry Signature	12/20/10 Date
(Same as above, for Avista Corp.) Print Name (Legal Owner or Part Owner Place of Use)	Signature	Date
(Same as above) Print Name (Legal Owner or Part Owner Place of Use)	Signature	Date
(Same as above) Print Name (Legal Owner or Part Owner Place of Use)	Signature	Date

Please check the region in which the project is located:

***Submit your application to:** DEPARTMENT OF ECOLOGY CASHIERING SECTION PO BOX 47611 OLYMPIA, WA 98504-7611	☐ Central Regional Office 15 W Yakima Avenue, Suite 200 Yakima, WA 98902 (509) 575-2490	☒ Eastern Regional Office 4601 N. Monroe Spokane, WA 99205-1295 (509) 329-3400
	☐ Northwest Regional Office 3190 – 160th Avenue SE Bellevue, WA 98008-5452 (425) 649-7000	☐ Southwest Regional Office PO Box 47775 Olympia, WA 98504-7775 (360) 407-6300

If you have questions about your application, contact the Water Resources program at the regional office in which your project is located.



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