STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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DEPARTMENT OF ECOLOGY - CENTRAL REGIONAL OFFICE

APPLICATION FOR PERMIT
TO CONSTRUCT A RESERVOIR AND TO STORE FOR BENEFICIAL USE WATERS OF THE STATE OF WASHINGTON

$50.00 NON-REFUNDABLE MINIMUM STATUTORY FILING FEE REQUIRED WITH APPLICATION
(GRAY BOXES FOR OFFICE USE ONLY)

APPLICATION NUMBER	W.R.I.A.	COUNTY	PRIORITY DATE	TIME	ACCEPTED
R4-35237	31	BENTON	May 15, 2009		

APPLICANT'S NAME	TELEPHONE NUMBER
City of Kennewick WA	(509) 585-4289
DATE AND PLACE OF INCORPORATION, IF APPLICANT IS A CORPORATION	

ADDRESS (STREET) PO Box 6108 (CITY) Kennewick (STATE) WA (ZIP CODE) 99336

1. **SOURCE, USE, AND CAPACITY OF RESERVOIR**

NAME OF PROPOSED RESERVOIR Columbia River Basalt Aquifer System (Wanapum Basalt or overlying) underlying the City of Kennewick near the Southridge High School and surrounding areas (Southridge site).

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NAME OF STREAM OR OTHER SOURCE FOR RESERVOIR SUPPLY

Water from the Columbia River diverted under Permit #S4-30976P (Quad Cities). Water diverted from the Columbia will be conveyed to the City of Kennewick's Filtration Water Treatment Plant, where it is filtered and chlorinated (unless obtained from a collector well), then sent to the distribution system. Water from the distribution system will be directly introduced into wells (to be installed) to recharge the basalt aquifer system.

TRIBUTARY OF: N/A

USE(S) TO BE MADE OF IMPOUNDED WATER (IRRIGATION, POWER, FISH PROPOGATION, ETC.) Municpal Supply

NUMBER OF ACRE FEET TO BE STORED AT MAXIMUM OPERATING LEVEL

To be determined through a testing program. A single well recharging at 900 gpm (1.3MGD) would likely store up to 233 MG (714 acre-feet) per year. Actual rates and volumes to be determined through testing. Additional storage capacity may be requested at a later date if additional ASR capacity is developed.

MONTHS OF YEAR DURING WHICH RESERVOIR IS TO BE FILLED

To be confirmed. Recharge water is expected to be available between October 15 and June 15 each year. The exact dates of recharge water availability are dependent on streamflows, water system demand, and biological flow requirements in the Columbia River system.

NUMBER OF ACRES TO BE IRRIGATED, IF USED FOR IRRIGATION N/A

TYPE AND CAPACITY OF DIVERSION WORKS IF WATER IS TO BE WITHDRAWN

Wells will be owned and operated by the City of Kennewick. The wells will be completed between 600 and 1200 feet below ground surface in the South ridge area of Kennewick. Actual well locations to be determined. The attached map (Figure 1) shows the general location of the City's proposed ASR well.

2. **LOCATION OF POINT OF DIVERSION OR WITHDRAWAL**

ON ACCOMPANYING PLATS OR MAPS, ACCURATELY MARK AND IDENTIFY EACH POINT OF DIVERSION.
GIVE MEASURED DISTANCE AND BEARING, OR NORTH-SOUTH AND EAST-WEST DISTANCES FROM NEAREST SECTION CORNER.

COMPLETE EITHER A OR B	A	THE RESERVOIR IS TO BE LOCATED IN THE CHANNEL OF (NAME OF STREAM)
	B	THE RESERVOIR IS TO BE FILLED THROUGH A FEEDER CANAL (OR PIPELINE) HAVING ITS POINT OF DIVERSION (INTAKE) LOCATED AS FOLLOWS Water will be diverted from the Columbia River at the City of Kenewwick's municipal water supply intake, filtered at the City's water treatment facility, and conveyed through the City's water supply system to the proposed ASR well location described below.

DISTANCE AND BEARING TO SECTION CORNER

The proposed storage reservoir is regional in scale and is described in the memoranda supporting this application. The storage zone is likely to be within a 2,000 foot radius of the location shown in Figure 1. The proposed ASR well is located in T9N, R29E-17 – approximately 2,600 feet south and 700 feet east to southeast corner of section 17.

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP N.	RANGE (E. OR W.) W.M.	COUNTY
SE ¼	17	8N	29E	Benton

3. **IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, COMPLETE THIS SECTION**

LOT N/A	BLOCK N/A	OF (GIVE NAME OF PLAT OR ADDITION) N/A

4. **LOCATION OF IMPOUNDING STRUCTURE**

IMPOUNDING STRUCTURE LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP N.	RANGE (E. OR W.) W.M.
Naturally occurring deep confined basalt aquifer within the Columbia River Basalt Aquifer System. See attached Figure 1.	17	8N	29E

LEGAL SUBDIVISION OF LANDS IN WHICH THE SUBMERGED AREA IS TO BE LOCATED
(THE OUTLINE OF THIS LAND IS TO BE SHOWN ON THE MAP TO ACCOMPANY THIS APPLICATION)

DO YOU OWN THIS PROPERTY	IF NO, HAVE YOU SECURED FLOOD RIGHTS FOR LANDS TO BE INUNDATED
☒ YES ☐ NO	☐ YES ☒ NO
The storage reservoir is the Columbia River Basalt Aquifer System. The City of Kennewick has an agreement with the land owner to acquire ownership of the parcel containing the ASR well.	No lands will be flooded. Storage will be underground in the Columbia River Basalt Aquifer System.

5. **CONSTRUCTION OF IMPOUNDING STRUCTURE**

HEIGHT OF DAM (FEET) N/A	LENGTH OF TOP (FEET) N/A	LENGTH OF BOTTOM (FEET) N/A	WIDTH ON TOP (FEET) N/A

CONTINUED ON NEXT PAGE

SLOPE OF FRONT OR WATER SIDE (NUMBER OF FEET HORIZONTAL TO ONE FOOT VERTICAL) N/A	SLOPE OF BACK SIDE (NUMBER OF FEET HORIZONTAL TO ONE FOOT VERTICAL) N/A
HEIGHT OF DAM ABOVE WATER LINE AT MAXIMUM FLOOD FLOW (FEET) N/A	
TYPE OF CONSTRUCTION OF DAM AND MATERIAL OF WHICH IT IS TO BE BUILT N/A	
LOCATION AND DIMENSIONS OF SPILLWAYS (STATE WHETHER OVER, AROUND, OR THROUGH DAM) N/A	

NUMBER OF ACRES TO BE SUBMERGED BY RESERVOIR WHEN FULL N/A	MAXIMUM DEPTH (FEET) N/A	APPROXIMATE AVERAGE DEPTH (FEET) N/A

ESTIMATED COST OF PROPOSED WORK	
CONSTRUCTION WILL BEGIN ON OR BEFORE (DATE)	CONSTRUCTION WILL BE COMPLETED ON OR BEFORE (DATE) Construction of additional ASR wells is expected to be planned and continue as long as financially and hydrogeologically feasible.
SIZE AND TYPE OF OUTLET STRUCTURE	

6. **LEGAL DESCRIPTION OF PROPERTY *ON WHICH WATER IS TO BE USED (IF DIFFERENT THAN ABOVE)***

COPY LEGAL DESCRIPTION FROM DEED: OR ATTACH COPY OF DEED. TAX STATEMENT DESCRIPTIONS ARE NOT ACCEPTABLE.
ALSO OUTLINE THIS PROPERTY ON THE MAPS OR PLATS SUBMITTED WITH THIS APPLICATION.

Area served by the City of Kennewick

DO YOU OWN THIS PROPERTY

☐ YES ☒ NO

IF NO, GIVE NAME AND ADDRESS OF OWNER

The water will be used in the area served by the City of Kennewick which includes multiple property owners. The City of Kennewick owns and maintains the water system infrastructure, including wells, distribution system piping and valving, water storage facilities, water treatment facilities, and raw water conveyance and storage.

BRYCE BEAUCHENE

Bruce Beauchene 4/16/09

SIGNATURE OF APPLICANT

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY } ss.

This is to certify that I have examined the foregoing application together with the accompanying maps and data, and return the same for correction or completion as follows:.....

.....

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In order to retain its priority, this application must be returned to the Department of Ecology, with corrections, on or before ....., 20.....

Witness my hand this ..... *day of* ....., 20.....

.....

Department of Ecology

If you require this document in an alternate format, please contact the Water Resource Program at (360) 407-6600 or TTY (for the speech or hearing impaired) at 711 or 1-800-833-6388.