

State of Idaho
Department of Water Resources
Water Right License
WATER RIGHT NO. 63-34208

PRIORITY: March 16, 2016

Maximum Diversion Rate: 0.67 CFS
Maximum Diversion Volume: 109.0 AF

It is hereby certified that:

CITY OF BOISE PUBLIC WORKS DEPT 150 N CAPITOL BLVD PO BOX 500
BOISE ID 83701-0500

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated March 16, 2016, and has submitted Proof of Beneficial Use on September 28, 2017. An examination confirms water is diverted from:

SOURCE:
GROUND WATER

TRIBUTARY:
BOISE RIVER

and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL DIVERSION VOLUME</u>
INDUSTRIAL	01/01 to 12/31	0.67 CFS	109.0 AF

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22, Twp 04N, Rge 01E, B.M. ADA County

PLACE OF USE: INDUSTRIAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N	01E	22									X	X							

CONDITIONS OF APPROVAL

1. Use of water under this right shall be non-consumptive.
2. Industrial use is for an educational water exhibit for Boise Water Shed River Complex at the City's West Boise Wastewater Treatment Plant.
3. After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to use power records to determine the amount of water diverted and shall annually report the information to the Department.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code. The water right confirmed by this license is subject to all prior water rights and shall be used in accordance with Idaho law and applicable rules of the Department of Water Resources.

Signed this 6th day of October, 2017.

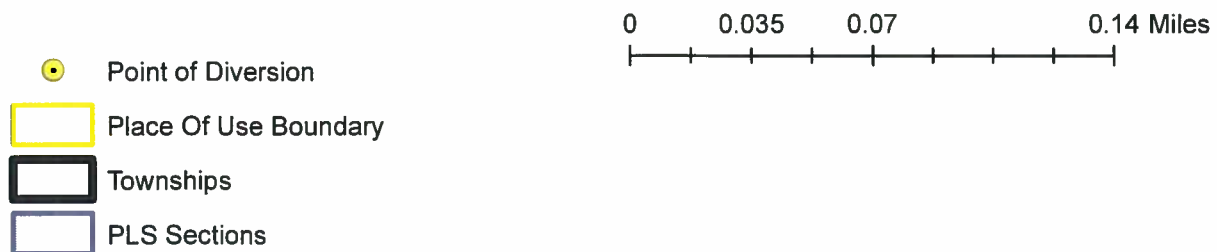


SHELLEY W. KEEN
Water Rights Section Manager

State of Idaho
Department of Water Resources
Attachment to Water Right License
63-34208

This map depicts the INDUSTRIAL place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

01E





State of Idaho

DEPARTMENT OF WATER RESOURCES

322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098

Phone: (208) 287-4800 • Fax: (208) 287-6700 • Web Site: www.idwr.idaho.gov

GARY SPACKMAN
Director

C.L. "BUTCH" OTTER
Governor

October 12, 2017

CITY OF BOISE
PUBLIC WORKS DEPT
150 N CAPITOL BLVD
PO BOX 500
BOISE ID 83701-0500

RE: License No.63-34208

Issuance of License

Dear Water Right Holder(s):

The Department of Water Resources has issued the enclosed Water Right License confirming that a water right has been established in accordance with your permit. Please be sure to thoroughly review the conditions of approval and remarks listed on your license.

The license is a PRELIMINARY ORDER issued by the Department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action by the Department unless a party petitions for reconsideration or files an exception and/or brief within fourteen (14) days of the service date as described in the enclosed information sheet.

Please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a \$100 late filing fee. Contact any office of the Department or visit the Department's homepage on the Internet to obtain the proper forms and instructions.

If you have any questions, please contact me at 208-287-4951.

Sincerely,

A handwritten signature in blue ink that reads "Pamela Skaggs".

Pamela Skaggs, Water Rights Supervisor
Water Right Permits Section

Enclosure(s)

cc: SPF WATER ENGINEERING LLC

CERTIFICATE OF SERVICE

I hereby certify that on October 13, 2017 I mailed a true and correct copy, postage prepaid, of the foregoing PRELIMINARY ORDER (**Approved License**) to the person(s) listed below:

RE: WATER RIGHT NO.

63-34208

**CITY OF BOISE
PUBLIC WORKS DEPT
150 N CAPITOL BLVD
PO BOX 500
BOISE ID 83701-0500**

**SPF WATER ENGINEERING LLC
C/O LORI GRAVES
300 E MALLARD DR STE 350
BOISE ID 83706**



Darla Block
Technical Records Specialist

EXPLANATORY INFORMATION TO ACCOMPANY A PRELIMINARY ORDER

(To be used in connection with actions when a hearing was not held)

(Required by Rule of Procedure 730.02)

The accompanying order or approved document is a "Preliminary Order" issued by the department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action of the Department of Water Resources ("department") unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. **Note: the petition must be received by the department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after: (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

REQUEST FOR HEARING

Unless a right to a hearing before the Department or the Water Resource Board is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its service date if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

- (a) The petition for reconsideration is disposed of; or
- (b) The petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

MEMORANDUM

TO: Water Right File 63-34208

FROM: Daniel Nelson – Analyst 3

DATE: October 5, 2017

SUBJECT: Licensing Review of Water Right 63-34208

This field exam was performed by Certified Field Examiner Terry Scanlan of SPF Water Engineering. Mr. Scanlan submitted several similar field exams for the same client, but this field exam is the only one for this use. Mr. Scanlan reported that 0.67 cfs and 109.4 af for industrial use.

The industrial use is for an interpretative center for the Boise Water Shed Complex next to the West Boise Water Treatment Plant. This educational exhibit is referred to as the River Campus. The River Campus was designed to simulate the Boise River. I have attached to this memo some of the on-line descriptions of this facility for a better understanding of how the system actually works.

There are a couple of issues that need to be addressed. Each will be addressed below:

Non-Consumptive Use:

This permit lists the use as non-consumptive. The water flows from the well into a small reservoir used to depict Lucky Peak Dam, and some of that water is used to irrigate a small garden area. Per Mr. Scanlan's report, water right 63-8125 diverts approximately 10 to 15 gallons per minute into the system. This flow rate would provide approximately 864,000 to 1,296,000 gallons per day ($\text{gpm} \times 60 \times 60 \times 24 = \text{total gallons per day diverted}$). The reservoir is very small (9,874 to 13,165 gallons) and has minimal evaporation losses (approximately 29 gallons per day on average).

The irrigation for the small irrigation plot (0.04 acres) would require approximately 719 gallons per day of water at a diversion rate of 0.03 cfs ($[0.04 \times 0.03 \times 1.9835] / 325850 = 719 \text{ gallons per day}$). The total of the pond use and the irrigation use is a total of 13,913 gallons (13,165 max. pond volume + 29 gal evaporation + 719 gal irrigation = 13,913 total gallons of consumptive use) can be covered by the amount of water diverted from 63-8125 of 864,00 to 1,296,00 gallons per day.

Therefore, the use associated with this permit not covered by water right 63-8125 should be considered totally non-consumptive. All consumptive use for this system should be covered by water right 63-8125.

Points of Diversion:

Mr. Scanlan located the point of diversion on an aerial photo in the SWSW of Section 22, Township 4 North, Range 1 East. The point of diversion appears to match the point of diversion in the application for permit and permit maps and the GPS downloaded point in the well drilling database. There doesn't appear to be an issue with the location of the point of diversion.

Place of Use:

Mr. Scanlan provided a reasonably good representation of the place of use. However, I expanded the place of use a little bit to include the entire campus. Mr. Scanlan didn't include some of the irrigated ground, since the irrigated lawn is supposedly covered by water right 63-8150.

Diversion Rate:

Mr. Scanlan provided 3 measurements for this system. The first measurement was a bucket and stop watch measurement on the 10 outflow ports of a fountain they refer to as a representation of Lucky Peak Reservoir at the beginning of the system. The second measurement was a pump curve and the third measurement was done on a V-Notch weir. All three of these measurements were taken after the water flowed through the fountain/pond, that is also receives water from water right 63-8125. Even though water from water right 63-8125 was not diverting water into the fountain, there could have been some residual water in the fountain that could have been measured.

Although three measurement methods were used, the methods used are open to concern. I am concerned with the amount of error that arises from measuring 10 different ports when trying to use a bucket and stop watch method. There could be fluctuations in the flow during the time it took to do the measurements. The pump curve gives a designed flow rate, but it doesn't give an actual rate of flow. Therefore, the only reasonable measurement would have been the measurement done on the V-Notch Weir. The measurement of the V-Notch Weir was 0.77 cfs, which I believe to be the most reliable measurement calculated. The V-Notch Weir measurement was still below the point where water from the other water source could have influenced the measurement, but it appears to be the best of the three measurements. The measurement was taken on the V-Notch Weir was above the amount allowed by the permit, so I am recommending the full permitted amount of 0.67 cfs be licensed.

Diversion Volume:

Mr. Scanlan recommended a diversion volume of 109 af. Mr/ Scanlan's calculations appear to be reasonable and accurate for this type of system. I am recommending this diversion volume be used for licensing.

Please Note: The fountain/reservoir is very small. It has a surface area of 440 square feet, and total depth from between 3 to 4 feet. The total evaporation losses from this reservoir would average less than 29 gallons per day for a total annual evaporation volume of 0.02 af per year. The fountain/reservoir is cement lined, so there would be no seepage. With the fountain/reservoir surface area and annual evaporation, the total amount of water used in this feature would be between 0.05 and 0.06 af. This use is so minimal that we should not require this feature to have a storage component. As mentioned above, most of the storage requirement is covered by diversions into the system from 63-8125, which is a municipal use that can be used for irrigation purposes and would fit within the 24 hour rule.

Overlap:

There are several water rights that overlap this place of use. Water rights 63-12312 and 63-8125 are decreed water rights that serve the waste treatment plant. Water right 63-12312 allows the diversion of water from a number of dewatering wells, and this right is considered to be totally non-consumptive.

Water right 63-8125 was originally licensed as a non-consumptive water right for water quality improvement at the waste treatment plant, but changed in the Snake River Basin Adjudication to a municipal water right without the non-consumptive limitations. Water right 63-8125 is now used to not only provide water for the lawns, but also for providing irrigation of grassy areas around the treatment plant including this complex. Water from this right is used to provide water for the fountain and some small irrigation of a garden area. The irrigation in the garden area is used to show how siphon tubes and other irrigation practices are done in the Boise River System.

This property also falls within the borders of the Thurman Mill Ditch Company, however, it doesn't appear as though any of this water is used for this site. Suez United Water also overlaps the place of use, and I am assuming this water is used for the restrooms.

The Snake River Basin Adjudication did allow several water rights owned by the City of Boise to have a service area as a place of use that covered a rather large area. Each of those rights are limited to a specific park or location. Water right 63-8125 is included in this group of water right decrees. However, none of these rights share a common distribution system, so each right is limited to the area where the point of diversion is located. The only right out of this group that affects this place of use is water right 63-8125. Please see the attached memo dated September 27, 2017 for additional information.

Conditions:

Conditions 1 (26A) and 4 (046) should be removed at licensing as is standard. Conditions 2 (027), 3 (01M) and 5 should be carried forward to licensing.

MEMORANDUM

TO: Water Right Permit File 63-8125

FROM: Daniel A. Nelson

DATE: September 27, 2017

SUBJECT: Service Area Shape file for files on Attached Spreadsheet.

While reviewing overlapping water rights for the licensing review of a water right permit, I discovered that there were 33 water rights that appeared to be located in a very small area in Government Lot 3 (NESW) and Government Lot 2 (NWSE) of Section 32 in Township 4 North, Range 2 East. This is the location of the City of Boise's Landon Waste Treatment Plant. All of these water rights are municipal water rights with a place of use within the City of Boise service area. According to the water right records, these rights were originally licensed for a number of different uses throughout the City of Boise.

With the assistance of Craig Saxton, we discovered that the large place of use defined in the Snake River Basin Adjudication (SRBA) recommendations, had a large place of use that covered the locations of all of those rights that are in the following spreadsheet. This large place of use shape file lies over the top of each of the places of use that were described on the original water right licenses.

When the SRBA decrees were moved over to the water right database, the large place of use file recommended on the water rights was not moved over with the water rights. Therefore, the place of use shown on all of the following water rights appear to be just for the Landon Waste Treatment Plant, and not for all of the uses originally licensed. Therefore, I have attached the correct large place of use shape file to the water right files.

There is one exception. Water right 63-9276 was involved in a water right transfer that showed the Landon Waste Treatment Plant as the place of use in the water right description. Therefore, the City of Boise will need to have that place of use changed separately, since the place of use for water right 63-9276 doesn't show the large place of use description. This could require a water right transfer to make this change.

The following spreadsheet shows the City of Boise water rights, and the place of use for which they were originally licensed. All of these rights will be updated except for water right 63-9276 will have the updated shape file as described above.

Water Right Number	Licensed Place of Use
63-10305	Parkcenter Park
63-10395B	Curtis Road and Orchard Road Interchange median Irrigation
63-12351	East Boise Waste Treatment Plant on Lander in Section 32
63-12575	East Boise Waste Treatment Plant on Lander in Section 33 -- This right has a specific place of use and is not part of the service area.
63-2841	Morris Hill Cementary
63-2843	Julia Davis Park
63-2845	Gowen Field Airbase
63-2925	Bowden Park
63-2933	Morris Hill Cemetery
63-2971	Place of use is the Pioneer Cemetery
63-2972	Fort Boise Park & Skate Park
63-31126	Clubhouse at Warm Springs Golf Course
63-3116	Municipal Park
63-3147	Ann Morrison Park
63-31701	Water used at National Rental Car facility at the Boise Airport.
63-3565	Winstead Park

Water Right Number	Licensed Place of Use
63-7179	Borah Park -- This right didn't have a Place of use in ArcMap.
63-7523	Green Belt Phase 1 (between Americana and 9th Street)
63-7524	Ivywild Park
63-7549	Irrigation of Median Traffic Islands on Broadway Avenue from Bellevue Street to Interstate 80N
63-7592	Kroeger Park
63-7666	Cassia Park
63-7668	Greenbelt Tract 11 (Between Emerald Street and Fairview Avenue)
63-7728	Median Strip on Front Street between 9th Street and Capitol Blvd.
63-8025	Median Strip on Vista Avenue south of Overland Road.
63-8125	West Boise Waste Treatment Plant in Section 22 on Joplin Road
63-8145	Fairmont Park
63-8263	Shoshone Park
63-8599B	Hobble Creek Park
63-8600	Sunset Park
63-9112	Owyhee Park
63-9276	Former Boise Water Corp geothermal well transferred to Boise Parks and Recreation. (Warm Springs Golf Course area) - This right has a limited place of use description added in per transfer 78257, but has the service area language.
63-9326	Demeyer Park

[illegible]

Menu

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Features & Highlights

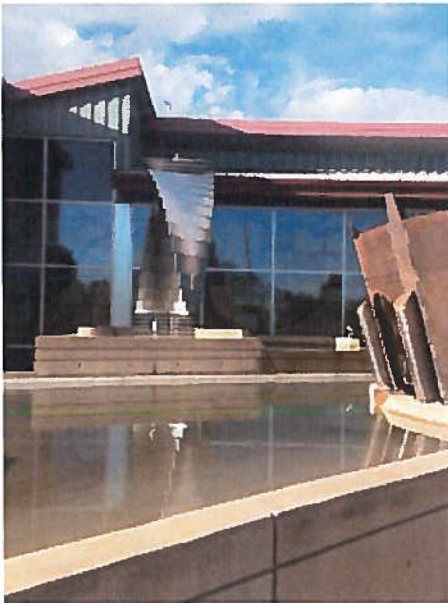
River Campus Features and Public Art



We send our thanks to the many, generous donors who helped build the River Campus!

Formally opened in April 2017, the River Campus is an educational and cultural site that incorporates the visions of highly skilled public artists with interactive exhibits of the natural and human-managed systems that provide our life-giving water.

River Campus elements are compelling examples of science interpreted through public art:

***Headwaters* by Matt Grover**

Where does our water come from? High in the Sawtooth Mountains, snow falls and melts, seeping into the soil and running through tributaries into the Boise River. Matt Grover has used historic data from Snow Water Equivalent data (SWE) to create a 10', three-sided stainless steel sculpture to represent our headwaters.

***Lucky Peak Dam and Reservoir* by Byron Folwell**

Named *Fluxion*, this interactive sculpture is composed of three distinct parts: the east concrete reservoir representing Lucky Peak Reservoir; the interactive steel dam sculpture; and the spillway, representing the Boise River. Large valves along the face of the dam allow visitors to control the flow of water.



The City of Trees

In this landscaped gathering place symbolizing our city grid, artist Amy Westover, with Dwane Carver, has installed *Mapping Infrastructure*, a series of tree grates that represent fire hydrants, sewer lines and sewer manholes.



Wastewater Treatment Plant

Connected to the City of Trees is a representation of the West Boise Wastewater Treatment Facility, with circular pavers that replicate the clarifiers that clean our wastewater. An actual 91" sewer trunk enters the treatment plant showing the size of infrastructure needed to transport our waste. Thanks to Eagle Sewer District, MWH, now part of Stantec, and Russell Corporation.



Boise River and *Wading In* by Michael Anderson

A channel of water meandering through the River Campus is representative of the Boise River. Children may play in the shallow river, make dams, and experiment with water flow. Along the river and the “Green Belt” pathway are ceramic relief panels created by Michael Anderson that depict aquatic life in and around the Boise River.

**Stormwater/*Beaver Dam* by Ken McCall**

A storm drain and accompanying interpretive signage, shows the need to protect urban pollutants from entering the Boise River. Nearby is *Beaver Dam*, a railing that takes its inspiration from the intricate construction of beaver dams. Thanks to Partners for Clan Water.

***Perfect World* by Reham Aarti**

This expansive mosaic consists of over 270,000 individual industrial glass tiles that the artist placed by hand. *Perfect World* depicts the impact that land surface use has on the soil and water below. The mosaic is designed to teach about urban agriculture and how important it is to conserve water individually and collectively. Thanks to Ada Soil and Water Conservation District.

Rural Agriculture and Dixie Drain

A demonstration area of agricultural irrigation is composed of two planted fields with different methods of applying irrigation water. The Dixie Drain, Boise’s innovative phosphorus removal facility is also depicted here. Thanks to Ada Soil and Water Conservation District.

Permeable Pavement Parking Lot

The River Campus parking lot is paved with permeable materials providing an immediate introduction to water wise practices that can be implemented into homes and businesses.

Intermittent Wetlands

A wetlands is an important feature in nature that cleanses runoff water and creates healthy ecosystems. This teaching site will demonstrate how wetlands are the link between land and water – a transition zone that is a nursery of life providing irreplaceable benefits for people.

Interactive Trail

Designed for children, the trail leads to five discovery play areas. Each of the five activities are designed to teach an environmental concept in a hands-on way: Nature's Loom, Tributary Balance Streams, Shape-A-Shelter, Jumbo Jenga, and River Rock Art will each provide hours of fun with children learning through play. Thanks to SUEZ, Micron Foundation, and Ada County Woodworkers.

New Exhibits

Learn about the new exhibits!

Upcoming Exhibits

Read about the new exhibits that are in the works!

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Boise WaterShed Exhibits, Inc. |

208-484-8293

RIVER CAMPUS



The River Campus was constructed in 2016 on the 2-acres surrounding the Boise WaterShed Education Center. The Boise WaterShed invites you to explore the messages of water protection and conservation in this new walk-through-your-watershed experience for all ages!

Through the use of exhibits, landscape, Public Art, and a water feature, the park-like setting takes you on a journey through the Boise River watershed from the headwaters to Lucky Peak Reservoir and Dam, across Boise's urban grid, through a sewer pipe to the simulated wastewater treatment facility. A flowing channel of shallow water - in which children can play - represents the Boise River.

Along the journey you'll also experience a wetland, two agricultural exhibits, and the amazing Public Art Integrated throughout. Ultimately, you'll walk away understanding how we must be responsible stewards of our water resources to ensure adequate, clean water now, and for future generations.



For children, a series of nature play spaces along the Interactive Trail teaches about the importance of a healthy ecosystem as they weave on outdoor looms, balance on tributary logs, create poetry with engraved river rocks, play a habitat game with giant Jenga blocks, and build shelters of sticks and logs. These experiences combined with the sewer pipe play area were designed with children ages 2 - 12 in mind.

Funding for this \$3.1 million project came from

- Boise WaterShed Exhibits, Inc. through community donations
- Boise Public Works Department
- Boise City Percent-for-Art Program

Designed by public artists, engineers, landscape architects, and educators, the River Campus makes the Boise WaterShed a regional destination!

Were you able to find the information you were looking for today?

☐ Yes

☐ No

Send