

RECEIVED

FEB 21 2008

DEPARTMENT OF
WATER RESOURCES

Michael C. Creamer [ISB No. 4030]
Michael P. Lawrence [ISB No. 7288]
GIVENS PURSLEY LLP
601 West Bannock Street
P.O. Box 2720
Boise, Idaho 83701-2720
Office: (208) 388-1200
Fax: (208) 388-1300
www.givenspursley.com

Attorneys for Janicek Properties, LLC

**IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT
OF THE STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS**

In Re SRBA

Case No. 39576

Subcase: 63-27475

**AFFIDAVIT OF
SCOTT N. KING**

STATE OF IDAHO)
) ss.
County of Ada)

I, SCOTT N. KING, having been duly sworn, do hereby depose and say as follows:

1. I am a Senior Project Engineer at SPF Water Engineering LLC. Since 1995, I have been licensed in Idaho as a Professional Engineer, License No. 7914. I have earned a B.S. in General Engineering from Idaho State University and a M.S. in Civil Engineering from University of Idaho. I have over 15 years of professional and academic experience in water resources engineering with SPF and with the Idaho Department of Water Resources. I specialize in water rights issues, water flow measurement, pumping system design, geographic information systems, and surface water models. Attached hereto as Exhibit A is a copy of my curriculum

AFFIDAVIT OF SCOTT N. KING - 1

S:\Projects\J thru L\Projects\Janicek Properties_653\0010 Purdam Gulch Creek\Docs\Affidavit\Aff of S King for MSJ (snk edits).DOC

vitae. I have personal knowledge of the matters set forth herein and I could testify competently as to such matters.

2. Between November 20, 2007 and February 11, 2008, I investigated water flows in Purdam Gulch Creek in and around the point of diversion for water right number 63-27475. During this period I visited the point of diversion and the vicinity at least four times, the first time being November 20, 2007 and the last time being February 11, 2008. Steve Bennett, an employee of SPF acting under my direction, visited and photographed the site on December 18, 2007.

3. During each of my visits I witnessed water flowing in Purdam Gulch Creek upstream of, downstream of, and at the point of diversion for water right number 63-27475. I also observed a flume installed in Purdam Gulch Creek downstream of the point of diversion and a weir installed upstream of the point of diversion.

4. Based on my professional experience and observations of the flume and weir, I estimate the flow in Purdam Gulch Creek near the point of diversion was as high as 2.28 cfs on November 20, 2007, and as low as 1.34 cfs on January 29, 2008. These observations were made more than one month after the typical end of the Nampa and Meridian Irrigation District delivery season.

5. On February 11, 2008, I observed discharge at the flume of approximately 2.0 cfs. This was following a period of snowfall and subsequent snow melt. Flow in the stream on this date did not appear significantly more turbid than previous visits, likely indicating that snowmelt and surface runoff was not significantly contributing to the flow. I looked around to see if I could observe any direct runoff into the stream, and didn't see much if any near the point of diversion for water right 63-27475. Based on my professional experience and observations, I

believe the snow mostly melted into the soil and did not cause significant surface runoff directly into Purdam Gulch Creek.

6. Based on my professional experience and observations between November 20, 2007 and February 11, 2008, I believe a vast majority of the water in Purdam Gulch Creek at and around the point of diversion for water right number 63-27475 was the result of interception of shallow ground water, and that direct surface runoff or drainage contributed to a lesser degree. Direct surface runoff may contribute varying quantities at other times of the year or under other precipitation conditions.

7. Based on my professional experience and observations, I believe that there is water flowing in Purdam Gulch Creek year-round.

8. During my investigation, I observed that Purdam Gulch Creek has a definite channel, having a bed and sides or banks, and that it contains a stream of flowing water. Attached hereto as Exhibit B are true and correct copies of photographs of Purdam Gulch Creek that I took on November 20, 2007 near the point of diversion for water right number 63-27475 that show the definite channel, the bed and the banks, and the stream of water flowing in Purdam Gulch Creek.

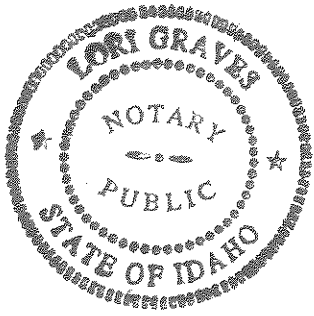
9. Based on my experience and observations, I know that Purdam Gulch Creek flows into Mason Creek, and Mason Creek flows into the Boise River.

DATED this 19th day of February, 2008.



Scott N. King

SUBSCRIBED AND SWORN to before me on this the 19th day of February, 2008.



Lori Graves

NOTARY PUBLIC FOR SPF WATER ENGINEERING

Residing at: BOISE

My commission expires: 6/18/2010

EXHIBIT A
CURRICULUM VITAE
SCOTT N. KING

Education

M.S., Civil Engineering
University of Idaho

B.S., General Engineering
Idaho State University

Professional Certification

Professional Engineer
Idaho No. 7914, 1995

Areas of Expertise

- Water rights investigations and analysis
- Water permit and transfer applications
- Water resource investigations
- Surface water modeling
- Flow measurement
- Pumping efficiency evaluations

Experience Summary

Mr. King has over 15 years of professional and academic experience in water resources engineering. He is currently a Senior Project Engineer with SPF Water Engineering, LLC and specializes in water right issues, water flow measurement, pumping system design, geographic information systems (GIS), and surface water models. Prior work includes 14 years experience in a broad variety of Idaho Department of Water Resources (IDWR) programs including water rights adjudication, water rights administration, safety of dams, and energy efficiency. He also has recent experience developing surface water models and providing consulting engineering services while employed at DHI, Inc, formerly known as the Danish Hydraulic Institute.

SPF Water Engineering, LLC – 2005 to present

Mr. King is currently a Senior Project Engineer with SPF Water Engineering, LLC. SPF was founded in March 2004 to provide hydrologic characterization, water resource development, and public water system design and regulatory compliance. Mr. King provides consulting services on water rights issues, surface water modeling, pump design, irrigation system evaluation, surface water hydrology, and river hydraulics. His recent project experience includes the following:

- Water right permit and transfer applications
- Water right investigations
- Water right acquisitions and sales
- Water right beneficial use field examinations
- SRBA claim preparation and support
- Stream flow measurement and monitoring
- Well design including designs to municipal public drinking water supply standards
- Well capacity determination
- Pressurized irrigation system design

DHI, INC – 2004 to 2005

Mr. King worked as a senior project engineer responsible for development of various surface water models. Project experience includes the following:

Modeling – MIKE 11. Developed hydrodynamic 1-D MIKE 11 model of the Little Claggett Creek storm water drainage system, a part of Marion County's East Salem Service District, Oregon. Produced flood maps for SCS Type 1A design storms and for the February 1996 flood event. This

model includes 8.5 km of stream in two branches, over 100 cross-sections extracted from a 2 ft vertical resolution DEM, and 23 culverts with corresponding broad-crested weirs representing roadways over culvert crossings. Inflow boundary conditions are represented by 21 catchments contributing point-source and distributed inflows simulated in MIKE 11's rainfall / runoff module.

Modeling – MIKE BASIN. Project lead on MIKE BASIN surface water distribution models developed for the Idaho Department of Water Resources. These models are used by IDWR for three primary purposes: flow enhancement tools to address flow-limited stream reaches; decision making tools to assist in selecting effective mitigation and restoration projects; and communication tools for educating decision makers and stimulating discussion among stakeholders. Developed systems include the Pahsimeroi River and East Fork Salmon River, and experiences with Lemhi River and Stanley Basin models. These models operate on a daily time step and represent the water distribution system within the basins including the stream networks, points of diversion, places of use, and locations of return flow. Time series information includes records of stream gaging, diversion measurements, precipitation, and evapotranspiration. Provided training to IDWR staff, contractors, and watermasters on the operation of MIKE BASIN through a series of hands-on sessions. Presented proposals to local waterusers and stakeholders for new model applications in Morgan Creek and Carmen Creek.

Modeling – Rainfall / Runoff. Developed lumped conceptual rain/snow/runoff models of the Stanley and East Fork Salmon River Basins for the Idaho Department of Water Resources using DHI's lumped conceptual rainfall/runoff module. The developed models are used to supply tributary inflow boundary conditions to the East Fork Salmon River and Stanley Basin MIKE BASIN models.

Developed rainfall/runoff models of 21 catchments supplying inflow boundary conditions for the Little Claggett Creek MIKE 11 model described above. Rainfall/runoff is simulated using DHI's URBAN module. Four storm events are modeled including the February 1996 observed event and SCS Type-1A 2-, 10-, and 50-year design storms.

Idaho Department of Water Resources – 1990 to 2004

During 14 years with the Idaho Department of Water Resources, Mr. King held four different positions and gained experience in a wide range of IDWR activities. These positions included Technical Engineer in the Adjudication Bureau, and Staff Engineer positions in the Water Distribution Section, in Western Region's Safety of Dams unit, and in the Energy Division. Relevant experience includes the following:

Program Management

Managed Western Region's Safety of Dams program. Inspected dams and made recommendations for maintenance and operation to improve safety and meet state standards. Issued storage certificates and authorizations to fill.

Lead technical consultant in statewide water measurement program. Defined water measurement standards and implemented a program for measuring and reporting ground-water withdrawals. Coordinated field work performed by department staff and various measuring districts. Inspected contractor projects for adequacy and compliance with department standards. Designed and managed water measurement databases.

Water Rights

Reviewed complex water right claims and prepared water right recommendations for the Director's Report to the Snake River Basin Adjudication court. Provided technical analysis and recommendations for nonstandard water right claims, such as claims for diversion rates exceeding the standard allocation, and for claims to the use of water outside of the standard seasons of use.

Provided training and direction to new employees, water districts, water measurement districts, groundwater districts, and private consultants on water rights, water measurement programs, and adjudication procedures.

Worked with water users and their legal representatives on various water right enforcement issues, including excessive and illegal water diversions.

Experienced with all aspects of IDWR regional office operations including water rights, transfers, well drilling, adjudication, water district operation, violations, enforcement, and customer complaints.

Irrigation and Pumping Systems

Performed pumping system evaluations including determinations of municipal, industrial, and agricultural pumping plant efficiencies and recommended measures for improved efficiency and reduced operating costs. Provided recommendations and designs for conversions to low-pressure irrigation systems for reduced operating costs and improved yields.

Technical Expert to Snake River Basin Adjudication (SRBA) Court

Provided technical engineering support to department staff in the ongoing SRBA.

Designated as department expert to the SRBA court regarding irrigation requirements, evapotranspiration, and crop water requirements. and how this information is utilized for preparing recommendations.

Public Relations

Presentations at public meetings to explain laws and regulations relating to water measurement and water appropriation.

Provided conflict resolution support for several water related disputes.

Trained IDWR employees, state Watermasters and Hydrographers,

contractors, and consultants on water measurement standards, equipment, practices, and procedures through regular training sessions and individual assistance.

Guest lecturer in 1996 and 1998 for College of Southern Idaho's Water Measurement course, and in 1998 for Boise State University's Water Measurement lab.

Presented *Selection and Installation of Pipe Flow Water Measurement Devices* at the 1997 Idaho Irrigation Equipment Show and Exhibition, Shilo Inn, Idaho Falls, January 8-9.

Technical

Developed and proposed to department administration and to the general public technically sound methods of using power records for estimation of pumped water diversions.

Determined acceptability and provided professional opinions for numerous non-standard water measurement methods and devices proposed to IDWR by engineering consultants and water users.

Determined conveyance capacity of pumps, diversions, pipelines, open channels, turbines, etc.

Led IDWR efforts to utilize global positioning systems (GPS). Developed standards for use, trained staff and consultants, and integrated GPS data collection into GIS work.

Report Development

Authored various reports including annual reports of ground water diversions, reports to individual water users, flowmeter accuracy reports, and various other reports relating to water measurement.

Co-author of *Eastern Snake Plain Aquifer Water Measurement Program, A Summary of Measurement Activity & Results from Basin 36 Project Area, 1995-1996 and a Review of Program Expansion in 1997*, IDWR, May 1998.

University of Idaho – 1999 to 2002

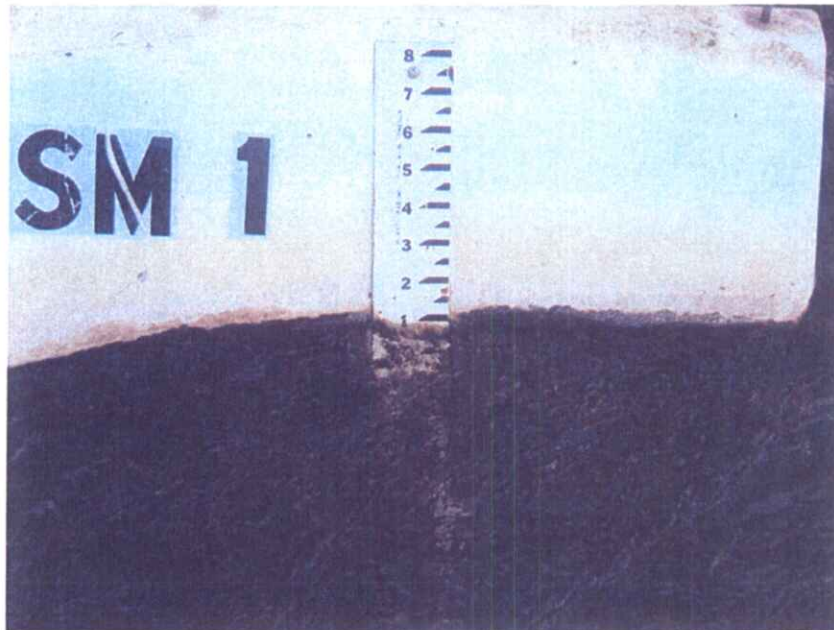
Masters of Science in Civil Engineering Thesis: The Effective Discharge Concept in Gravel Bed Stream Restoration: The Twelve Mile Reach of the Salmon River at Challis, Idaho.

Determined channel effective discharge based on sediment transport measurements and flow records. Compared effective discharge to bankfull discharge and stated implications of findings in regards to channel restoration. Completed hydraulic, hydrologic, and geomorphologic characteristics of the study reach. Presented findings and recommendations to technical groups and local property owners.

Developed hydrodynamic pseudo 2-D MIKE 11 model of the Twelve Mile Reach, Salmon River, near Challis, ID. Produced animated flood maps of

primary flooding events from 1974 (100-yr), 1996, and 1997. This model includes 27-km of mainstem river including braided sections and split flows. Over-bank discharge into Hannah Slough and across One-Mile Island is represented by link-channels. The model includes 68 surveyed cross-sections and utilizes a 2-ft interval contour map for flood mapping.

EXHIBIT B
PHOTOGRAPHS OF PURDAM GULCH CREEK
NEAR THE POINT OF DIVERSION FOR
WATER RIGHT NUMBER 63-27475



Photograph 3. Gage in feet and set on 45° sidewall. Weir head (in feet) is $0.707 \times \text{Gage Reading}$. Average gage reading was approximately 1.12 ft. Flume tables indicate 2.3 cfs at this stage.



Photograph 4: 6-inch deep V-notch weir cut into a 7-ft Cipoletti Weir. Based on "sticking the weir" with a steel carpenter's tape to measure water surface elevation, the right corner of the crest is approximately $\frac{1}{4}$ -inch lower than the left corner. Recommend decreasing staff gage reading by 0.01 ft.

Photographs obtained November 20, 2007, afternoon.



Photograph 1: Water Right No. 63-27475 point of diversion from Purdam Gulch Creek in background with Trapezoidal Flume in mid-photo.



Photograph 2: Trapezoidal flume appears to be Plasti-Fab model 12" - 45° SRCRC.



Photograph 5: Staff gage reading indicates 0.17 ft of head over Cipoletti Weir Crest. Approximate discharge at this stage is 2.2 cfs.