

Memo

To: File 11-7491 Sam's Hollow

From: Sandy Hemenway

Date: 5/10/2011

REF: Review of 2010 Annual Report, Mitigation Plan

On 4/25/2011, the Department received the 2010 Annual Report submitted by Brockway Engineering (description of curtailment plan is due by 5/1). Reviewing the report, it shows that Sam's Hollow Water Company owns shares in Fish Haven Water Users, for delivery through 3- ditches from Fish Haven Creek to this project. During 2010, deliveries through Ditch No. 3 were the source of water for mitigation. A portion of the flow through Ditch No. 3 was delivered into a pond and then through the flow meter, and discharged into Bear Lake.

Number of residents, and new residents was submitted annually and shown on a map.

Mitigation requires acres previously irrigated to be dried up to compensate for additional consumptive use. In 2009, 22.2 acres were dried up. Estimates for 2011 required 9.24 AF, therefore 3.45 AF will be provided from additional irrigation reduction in the amount of 2.92 acres.

Reviewing the information submitted, the report indicates that more water was mitigated to Bear Lake (10.69 AF) than was used for condominiums and commercial use (8.25 AF). The amount mitigated to Bear Lake exceeds the mitigation requirement.

Items under Condition No. 4 of the approved Amendment of Permit:

- (1) Management and operation plans with components of the 10/7/2003 Settlement Agreement with PacifiCorp. (prepared by Brockway Engineering 6/19/2006---copy in the file)
- (2) Method for forecasting flow (completed in 4/25/2011 report – the Bear River Basin snow pack based on NRCS SNOTEL data)
- (3) Forecast by 4/1 for volume of water to be diverted (completed in 4/25/2011 report—used 3/28/2011 NRCS SNORTL data, for expectation of water for mitigation)
- (4) Description of curtailment prior to 5/1 (*completed in 6/19/2006 report---members will be notified by Sam's Hollow Water Company of need to implement conservation measures, by registered mail*)
- (5) Description of how flow will be monitored and enforced (completed in 4/25/2011 report –monitored and maintained by Sam's Hollow staff)
- (6) Description of entire flow path of mitigation water (completed in 4/25/2011 report—conveyance channel from the end of the irrigation system to pipeline to Bear Lake from Fish Haven Creek)
- (7) Location of each measuring device (completed in 4/25/2011 report—Fish Haven Water Users 3 ditches, measured through calibrated flumes; Ditch No. 3 delivers to pond, then through flow meter located east of the Fish Haven Cemetery, discharged into Bear Lake))
- (8) Frequency of measuring (completed in 4/25/2011 report/chart---not described in narrative, but shown on chart, *no monitoring was conducted during the month of August*)
- (9) List of those to who reports will be submitted (completed in 4/25/2011 report—outlined in the Plan, which was submitted to IDWR)
- (10) Identify specific officers, by title, in association (see attached email, and 2005 Water Mgmt. Plan)
- (11) Alternative plan for mitigation (see attached email, and 2005 Water Mgmt. Plan)
- (12) Operations manual for the benefit of employees working for Sam's Hollow (see attached email, and 2005 Water Mgmt. Plan)

Hemenway, Sandy

From: Greg Sullivan [greg.sullivan@brockwayeng.com]
Sent: Tuesday, May 10, 2011 11:48 AM
To: Hemenway, Sandy
Subject: RE: 11-7491 Sam's Hollow, review of 2010 Annual Report, Mitigation Plan
Attachments: Sam's Hollow.PDF

Sandy,

I have attached the first few pages for the Water Management and Operations Plan for Mitigation- Revised for Sam's Hollow. Page six describes the reliability of the Fish Haven Water Users Association water right 11-4022 in which additional mitigation water can be obtained if needed. Also indicated was that additional water could be found if needed or ground water use of the project could be curtailed to in-house use only if needed. I believe this information is sufficient for an alternative plan for mitigation.

I have found in our files an operation manual that was sent to Sam's Hollow that outlined the necessary data collection and annual time line of information retrieval and reporting.

I have email the manager of the project for more information concerning the individual that is responsible for the oversight of system operation. When I receive this information, I will forward it on to you.

Greg Sullivan
Brockway Engineering
2016 North Washington Street, Suite 4
Twin Falls, ID 83301
Office: 208-736-8543
Fax: 208-736-8506

From: Hemenway, Sandy [<mailto:Sandy.Hemenway@idwr.idaho.gov>]
Sent: Tuesday, May 10, 2011 8:30 AM
To: Greg Sullivan
Cc: Hemenway, Sandy
Subject: 11-7491 Sam's Hollow, review of 2010 Annual Report, Mitigation Plan

Greg,

There are 3 highlighted items at the bottom of the attachment. If you have information on numbers 10 and 11, could you please forward that to me? All I need to know for number 12 is, whether or not Sam's Hollow has an operation manual for the benefit of the employees.

Thanks so much, <<11-7491 Sams Hollow mitigation review5.10.2011.docx>>

Sandy Hemenway

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Project No. 370-01-1999

Water Management and Operations Plan for Mitigation - Revised

Prepared for:

Sam's Hollow Water Company
Bear Lake, Idaho

September 9, 2005

For information concerning this report, contact
Charles E. Brockway, Ph.D., P.E.



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P.L.L.C.

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2016 NORTH WASHINGTON, SUITE 4
TWIN FALLS, IDAHO 83301

Project No. 370-01-1999

Water Management and Operations Plan for Mitigation - Revised

Prepared for:

Sam's Hollow Water Company
Bear Lake, Idaho

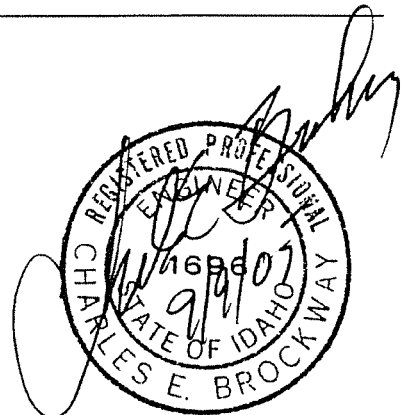
September 9, 2005

For information concerning this report, contact
Charles E. Brockway, Ph.D., P.E.



CHARLES E. BROCKWAY, PH.D., P.E.
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Appendices

- A. Sam's Hollow Water Company Articles of Incorporation
- B. Agreement-Fish Haven Water Users Association, Sam's Hollow Water Company and C. Howard Johnson
- C. Agreement-Sam's Hollow Water Company and Pacific Corp
- D. Fish Haven Creek Diversions-2004
- E. Development Operating Agreement – Sam's Hollow Water Company and C. Howard Johnson

Water Management and Operations Plan for Mitigation - Revised

Sam's Hollow Water Company

Prepared for Sam's Hollow Water Company

Prepared by: Charles E. Brockway, P.E., Ph.D. - Brockway Engineering, PLLC
Date: Revised September 9, 2005

Introduction

Sam's Hollow Water Company is an Idaho non-profit corporation formed to provide culinary and irrigation water to Phase 1 and Phase 2 of the Bear Lake Haven subdivision near Fish Haven, Idaho, in Bear Lake County. The Company Articles of Incorporation were approved by the Secretary of State for Idaho and are included in Appendix A and a copy of the Operating Agreement between Sam's Hollow Water Company and C. Howard Johnson, owner of the subdivision property, is in Appendix F of this manual.

The culinary water supply and irrigation water for landscaping for the project is provided from ground water utilizing strategically located wells and a community distribution system. Irrigation water for cropped areas will continue to be supplied from the existing irrigation system from Fish Haven Creek. Water is pumped as needed from the aquifer and distributed using storage tanks and an engineered distribution system.

Under the recently adopted Management Plan for the Bear Lake Ground Water Management Area, any depletion to Bear Lake and/or Bear River resulting from subdivision development or other changes in use of water must be mitigated and an acceptable mitigation plan approved by the Idaho Department of Water Resources. This mitigation plan must incorporate guidelines for mitigation determination contained in the Bear Lake Ground Water Management Plan.

An application for a permit to develop and distribute ground water for the proposed project with a mitigation plan was submitted to IDWR. The plan provided for mitigation of depletions from ground water development by conveying water historically used for irrigation on land within the Sam's Hollow Water Company service area directly to Bear Lake and drying up of historically irrigated land. The water from Fish Haven Creek, historically used for irrigation, is provided through shares in the Fish Haven Water Users Association to land owned by Bear Lake Haven Subdivision which is served by Sam's Hollow Water Company. Irrigation water is provided through three ditches from Fish Haven Creek to Sam's Hollow lands. An agreement, dated March 14, 2002, between the Fish Haven Water Users Association, Sam's Hollow Water Company and C. Howard Johnson provides for the use of shares for mitigation of depletions caused by ground water pumping. The agreement stipulates that Sam's Hollow Water Company will continue to divert water from Fish Haven Creek as has historically been accomplished and return the necessary water directly to Bear Lake for mitigation purposes. A copy of this Agreement is included in Appendix B.

The application for permit was protested and a hearing held by IDWR. A stipulated agreement between Sam's Hollow Water Company and Pacific Corp was adopted and Pacific Corp withdrew their protest. A copy of that Agreement is included in Appendix C. An order approving the permit and mitigation plan was issued by the Department on May 24, 2004. Pursuant to the Order, Permits were issued for water rights 11-7481 and 11-7491 on September 7, 2004. Condition #4 of the Order and permits require the submittal and approval by IDWR of an Water Management and Operations Plan for the project to outline the procedures to be used by Sam's Hollow for complying with the mitigation requirements for the project.

The purpose of this plan is therefore to outline specific procedures to be followed by personnel of Sam's Hollow Water Company to assure that proper mitigation of depletions caused by the project are maintained.

Water Supply Available for Mitigation

Distribution System and Flow Measurements

Water supply available to Sam's Hollow Water Company for use on lands of the Bear Lake Haven Subdivision is via shares in the Fish Haven Water Users Association. These shares can be diverted through any of three ditches: the Upper North Ditch, Number 1 Ditch and Number 3 Ditch. These ditches now have been instrumented with water measuring flumes and flow measurements

;are being obtained on each of these three ditches and the other two ditches diverting to the south from Fish Haven Creek. The flumes were installed by the Fish Haven Water Users Company with assistance from Sam's Hollow Water Company and are being monitored by Sam's Hollow Water Company twice a week. Measurements began on May 22, 2004. These bi-weekly measurements will continue to be obtained either by the Fish Haven Water Users Company or by Sam's Hollow Water Company. Time and date of commencement or cessation of diversion into each ditch will be logged as well as discharge set at commencement and discharge just prior to cessation. Data obtained through August 24, 2004 are contained in the Diversion Log sheets in Appendix D.

Compilations of the historical water available for diversion to Sam's Hollow Water Company through each ditch will be made each month based on the shares applicable to the Sam's Hollow service area. Measurements and historical monthly water availability will be made each year for the irrigation season.

Estimation of Sufficiency of Mitigation Water

Build-out of the subdivision will likely occur over at least 10 years and a data base of Fish Haven Creek diversions will be compiled. The seasonal water availability for Sam's Hollow will be compared with selected snow course data and/or Bear River forecast data to determine indicators of expected water availability for pending irrigation seasons. A determination will be made by April 1 of each year as to the estimated water available for mitigation for the pending irrigation season. An estimate of expected depletion from the project ground water based on the number of units on-line for the next season will be made by April 1 of each year using procedures approved in the Bear River Ground Water Management Plan.

Reporting

The President of Sam's Hollow Water Company will be responsible for monitoring and management of the water system and mitigation system. An annual report will be prepared which will include the number and type of units being served by the water system, monthly and annual water use by each of the wells in the system, monthly and annual water received under shares in each ditch from Fish Haven Water Users Company, irrigated acres within the project, estimated annual depletion attributable to the project and monthly and annual measured flow volume returned to Bear Lake through the mitigation pipeline. This report will be submitted to the Idaho Department of Water Resources and made available to members of Sam's Hollow Water Company and Fish Haven Water Users Company .

Mitigation Water Return System

A pipeline to return diverted water from Fish Haven Creek will be designed and installed to convey water directly from the ditch(s) traversing the property to Bear Lake. In Phase I of the project, a pipeline directly from No 1 ditch and No 3 ditch eastward (downhill) to the culvert under HW 89 and into Bear Lake will be installed. A flow meter will be installed in this pipeline upstream of the entrance to the culvert with a control valve and valve box. This will allow conveyance of water directly from the two ditches to Bear Lake. The pipeline and flow meter sizes will be determined when the system is designed but will likely be six (6) inch diameter. When build-out is sufficient, the pipeline may be modified and extended westward (uphill) to the Upper North ditch if necessary. Alternately, shares from the Upper North ditch may be transferred to the Number 1 and Number 3 ditches.

Monitoring

The President of Sam's Hollow Water Company will be responsible for securing measurements on water diversions from Fish Haven Creek either from the Fish Haven Water Users Company or by continued measurement by Sam's Hollow Water Company of diversion discharge in the event the Fish Haven Water Users Company fails to continue the monitoring program. Sam's Hollow Water Company instituted a flow measurement protocol for the Fish Haven ditches and has been monitoring these flows for the 2004 irrigation season. Sam's Hollow Water Company will continue to monitor these ditch flows if the Fish Haven Water Users Association fails to continue the water measurement program and provide the flow data to Sam's Hollow. In addition the President will be responsible for providing measurement of discharge and volume flows from all wells in the system as well as mitigation return flows to Bear Lake. The Manager will operate the mitigation return system to assure that the required mitigation water is being returned to Bear Lake and that the project is in compliance with all provisions of the Order.

Mitigation Depletion Calculation

The volume of mitigation water required to be returned to Bear Lake will depend on the number and type of units being served by the water system. Procedures outlined in Exhibit #14 of the hearing, Narrative in Support of Application for Permit, Sam's Hollow Water Company Phase I and Phase 2, revised October 7, 2003, will be utilized to determine the required mitigation volumes. These

procedures are also included as Exhibit C of the Settlement Agreement between Sam's Hollow Water Company and PacifiCorp.

Flow Measurement Sites

Discharge and flow measurement sites will be instrumented with IDWR approved measuring devices. These meters will be equipped with instantaneous discharge and totalizer capability and will be either in-line propeller type meters (McCrometer or equivalent) or magnetic meters with digital readout (Sparling TigerMac or equivalent.)

Discharge and volume measurements will be made on:

1. All wells in the project
2. Direct flow through the pipeline to Bear Lake
3. All ditches from Fish Haven Creek.

Notification

By May 1 of each year, a determination of the adequacy of available mitigation water will be made and, if the estimated depletion exceeds the estimated available supply, the members will be notified by Sam's Hollow Water Company of the need to implement conservation measures. This notification will be by registered mail to each member outlining the measures to be implemented.

Conservation Measures

In the event conservation measures have to be implemented, Sam's Hollow Water Company will determine the required measures based on estimated depletion calculated using the Ground Water Management Plan guidelines (Exhibit #14) and the estimated available water for mitigation from the canal system. Specific measures will be determined at the time and can include:

1. Curtailment of additional crop irrigation
2. Full or partial curtailment of landscape irrigation
3. Reduction or curtailment of water use for any recreational or aesthetic facilities

Enforcement of any conservation measures will be performed by the Manager as dictated by the Board of Sam's Hollow Water Company.

The Fish Haven Water Users Association water right is a statutory claim (11-4022.) This claim is for a beneficial use for diversion of 29.6 cfs for irrigation of 1212 acres with a priority date of May 18, 1871. This claim has not been adjudicated by the Idaho Department of Water Resources. Mr. Pete Peterson, Watermaster for the Bear River indicates that in the Bear River system, natural flow rights with priority of May 18, 1871 have never been cut off. Sam's Hollow Water Company has 140.5 shares or 11 percent of the reported 1283.02 shares of Fish Haven Water Users Association applicable to approximately 120 acres of irrigated land within the project. It is estimated that Sam's Hollow Water Company would have to provide 110 acre feet annually returned to Bear Lake to mitigate for the full project (Phase 1 and Phase 2) build out.

In the event the water available to Fish Haven Water Users under statutory claim #11-4022 is modified, the appropriate changes in the mitigation plan will be determined and incorporated. Ample time will be available to secure additional water for mitigation either from additional shares in the Fish Haven system or other transfers since full build out may take 20 years. If additional water for mitigation is necessary but not available in a timely manner, annual ground water use by the project will be curtailed to assure compliance with the mitigation plan. This could entail, at a minimum, ground water extraction only for in-house use.