



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

**APPROVED
RESERVOIR
REPORT OF EXAMINATION**

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

PRIORITY DATE October 25, 2006	APPLICATION NUMBER R1-28468A	PERMIT NUMBER	CERTIFICATE NUMBER
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NAME

Stratton Family Trust (Frank E. & Heong L. Stratton – Trustees)

ADDRESS (STREET)	(CITY)	(STATE)	(ZIP CODE)
P.O. Box 875 (mailing)	Eastsound	WA	98245-0875
3599 Buck Mountain Road (physical)	Eastsound	WA	98245

SOURCE FOR RESERVOIR SUPPLY Groundwater seepage and direct precipitation	TRIBUTARY OF (IF SURFACE WATERS) Unnamed stream
NUMBER OF ACRE FEET STORED WHEN RESERVOIR IS FULL 0.56	USE(S) TO BE MADE OF IMPOUNDED WATER Recreation, beautification, & wildlife enhancement

LOCATION OF IMPOUNDING STRUCTURES

APPROXIMATE LOCATION OF IMPOUNDMENT STRUCTURE

2380 feet west and 400 feet north of the southeast corner of Section 17

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISIONS)

SW1/4 SE1/4

SECTION 17	TOWNSHIP N. 37	RANGE, (E. OR W.) W.M. 1W	W.R.I.A. 2	COUNTY San Juan
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LEGAL SUBDIVISION OF LAND IN WHICH THE SUBMERGED AREA IS TO BE LOCATED

Lot 84 of Assessor's Plat No. 1 of Buck Mountain Tracts

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

Lot 84 of Assessor's Plat No. 1 of Buck Mountain Tracts, Records of San Juan County, Washington. San Juan County Tax Parcel 171750084000.

Attachments 1 and 2 show the location of the Stratton property and the impoundment structure.

CONSTRUCTION DETAILS OF IMPOUNDMENT STRUCTURE

Note: NOPL means Normal Operating Pool Level

HEIGHT OF DAM (FEET) 2+/-	LENGTH ON TOP (FEET) 36+/-	WIDTH ON TOP (FEET) 8-10
SLOPE OF FRONT OR WATER SIDE (Number of feet horizontal to one foot vertical): 1:1	SLOPE OF BACKSIDE (Number of feet horizontal to one foot vertical): 1:1	
HEIGHT OF DAM ABOVE WATER LINE AT NOPL (FEET) 1		

TYPE OF CONSTRUCTION OF DAM AND CONSTRUCTION MATERIALS

Earth fill, composed of local fill material

LOCATION AND APPROXIMATE DIMENSIONS OF SPILLWAYS

Discharge (when it occurs) – Twin 4” diameter pipes through the dam

Overflow (rare usage) – 10” diameter drain pipe through the dam

# OF ACRES SUBMERGED WHEN RESERVOIR IS FILLED TO NOPL 0.14+/-	MAXIMUM DEPTH (FEET) AT NOPL 8+/-	AVERAGE DEPTH (FT) 4+/-
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DESCRIPTION OF PROPOSED WORKS

Stratton Pond (a small reservoir) is approximately 110 feet long by 35 feet wide. It is fed primarily from seepage coming from the east of the pond and from direct precipitation. Overflow exits the pond (on the west side) through spillway pipes to create an unnamed stream that flows to the north across the Stratton property. (See Attachment 2 for additional details)

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE Begun	COMPLETE PROJECT BY THIS DATE Completed	WATER PUT TO FULL USE BY THIS DATE In full use
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PROVISIONS

- PROOF OF APPROPRIATION:** The water right holder shall file the notice of Proof of Appropriation of water (under which the certificate of water right will be issued) after the thirty day appeal period for this report of examination has expired, assuming no appeals.
- DAM SAFETY:** Dam owners are required to evaluate the safety of their dam and all appurtenant works and to make modifications, as become necessary, to reasonably secure safety to life and property. For current requirements, please contact:

Doug Johnson
 Dam Safety Office Leader
 Department of Ecology Dam Safety Office
 PO Box 47600, Olympia, WA 98504-7600
 (360) 407-6623
djsd461@ecy.wa.gov

FINDINGS OF FACT AND ORDER

Upon reviewing the investigator’s report, I find all facts relevant and material to the subject application have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question, the purpose of use is beneficial, there will be no impairment of existing rights, and there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. R1-28468, subject to existing rights and the provisions listed above.

You have a right to appeal this ORDER. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the “date of receipt” of this document. Filing means actual receipt by the Board during regular office hours.
- Serve your appeal on the Department of Ecology within 30 days of the “date of receipt” of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). “Date of receipt” is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of this document that you are appealing with your Notice of Appeal.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

The Pollution Control Hearings Board
PO Box 40903
Olympia, WA 98504-0903

OR

Deliver your appeal in person to:

The Pollution Control Hearings Board
4224 – 6th Ave SE Rowe Six, Bldg 2
Lacey, WA 98503

2. To serve your appeal on the Department of Ecology

Mail appeal to:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, WA 98504-7608

OR

Deliver your appeal in person to:

The Department of Ecology
Appeals Coordinator
300 Desmond Dr SE
Lacey, WA 98503

3. And send a copy of your appeal to:

Andrew B. Dunn
Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue WA 98008

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov> . To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser> .

Signed at Bellevue, Washington, this 27th day of February, 2009.

Andrew B. Dunn, LG, LHG
Section Manager
Water Resources Program
Northwest Regional Office

INVESTIGATOR'S REPORT

BACKGROUND

On October 25, 2006, Frank E. and Heong L. Stratton applied for a reservoir water right for a pond located on their (6.87 acre) Orcas Island property. The pond was constructed some number of years prior to the Stratton's purchase of the property in the fall of 2000. The Stratton's desire is to document and confirm the legality and existence of their impoundment, and to utilize the entrapped seepage flow to fill the impoundment in future years.

Legal Requirements for Application Processing

Chapter 90.03 RCW authorizes the appropriation of public water for beneficial use and describes the process for obtaining reservoir water rights. Laws governing the permitting process are contained in RCW 90.03.250 through 90.03.370.

The following legal requirements must be met prior to processing a water right application:

- Public Notice
Public notice of the application was published in *The Islands' Sounder* on November 15 and 22, 2006. There were no protests during the statutory 30-day protest period.
- State Environmental Policy Act (SEPA)
The subject water right application is categorically exempt under SEPA WAC 197-11-305 and WAC 197-11-800(4) because no actual diversion of water will occur.

INVESTIGATION

In considering this application, my investigation included, but was not limited to, research and/or review of:

- Information supplied with the water right application
- Aerial photos from the San Juan County Tax Assessors Web site
- The USGS Mount Constitution 7.5 minute topographic map
- Water Supply Bulletin No. 46, Geology and Water Resources of the San Juan Islands, Dept. of Ecology, 1975
- A database search for water rights on the same source of supply
- Notes from my site visit on November 5, 2008

Information Supplied with the Water Right Application

The following information was excerpted from a cover letter that accompanied the Stratton application:

When I [Frank Stratton] first obtained the property the dam had no spillway or overflow arrangement, and there was evidence that it had been overtopped in past winters. I added two parallel 4-inch drainpipes as drainage, and a ten-inch drainpipe as a maximum overflow spillway. The 4-inch discharge pipes have drainage for six to eight months out of the year. Only once during my ownership of the property have I observed the water level to rise sufficiently to pass any flow through the ten-inch "spillway", and that only a small trickle. Overflow from the impoundment passing through these pipes ponds in an extended area downstream. During maximum flows in the winter it continues down through the canyon between my lot 84 and the neighboring lot 86, flowing eventually back to the lower portion of my lot and possibly further east, though flows are limited and time dependent so I have not tried to track them further.

It is important to note that my property is at the crest of a pass, and discharge from this impoundment does not flow down towards Purdue Lake (which serves Eastsound Water Users' Association, and for which they have surface water rights). Rather it first flows northerly and then easterly, away from Purdue Lake.

The existing dam for the impoundment is approximately eight to ten feet wide at the top, rises about two feet above the ground level at the non water-face, and because of excavation, is possibly as much as five or six feet at the front water-face side. It appears to be quite stable, and the existing drainage and spillway discharges make it unlikely that any type of hydraulic induced failure could occur. There are no contours recorded below the water line, and I have conservatively estimated the depth at maximum water level to be four feet averaged over the entire surface area. I would not be surprised if it averaged closer to three feet. At the time of this writing the water level appears to be at its typical seasonal low point, which is approximately 26 +/- inches below the four inch discharge pipes and approximately 30 +/- inches below the ten inch "spillway".

The Pond is an important focal point on the property, and I desire to confirm its legality for my ownership and future owners.

Aerial Photo of the Stratton Property obtained from the San Juan County Tax Assessors Web site



Information from the USGS Topographic Map

The USGS Mount Constitution topographic map shows the Stratton Pond to be at an elevation of approximately 1440 feet above mean sea level. The pond is located a little more than ¼ mile north of the northern boundary of Moran State Park and approximately 1 mile southeast of Buck Mountain. From the Stratton property the topography drops steeply to the northeast toward the Strait of Georgia.

Information from Water Supply Bulletin No. 46

The estimated mean annual precipitation in the vicinity of the Stratton property is approximately 30 inches. Estimated annual runoff is 12-15 inches. Runoff numbers are relatively high because the area is composed almost entirely of bedrock. The bedrock is described as being Lower Pennsylvanian age marine beds of stratified to massive andesitic pyroclastic rocks and volcanic sediments; chiefly breccia, lapilli-tuff and dark siliceous tuff, with interbedded limestone.

Database Search of Other Water Rights on the Same Source of Supply

A query of Ecology's Water Rights Tracking System showed no previous water rights have been issued on the Stratton Pond or the overflow channel.

A query of Ecology's Well Log database showed 53 well logs on file for Section 17, including one for Frank and Heong Stratton. All the wells in this section appear to be completed in bedrock. The Stratton well is used for permit-exempt purposes as allowed under RCW 90.44.050. The well was drilled in December of 2000. It was drilled to a depth of 600 feet through bedrock.

Site Visit

On November 5, 2008, I visited the Stratton property. Mr. Stratton was present. He provided me with a tour of his pond, dam, and outlet channel. I confirmed the existence of the 4" drain pipes and the 10" spillway pipe. At the time of my visit the pond level was approximately two feet below the level of the 4" drain pipes.

DETERMINATIONS

In accordance with RCW 90.03.290, determinations must be made on the following four criteria in order for an application for water rights to be approved:

- Water must be available
- There must be no impairment of existing rights
- The water use must be beneficial
- The water use must not be detrimental to the public interest

Water Availability

Legal Availability

There are currently no regulatory closures or legal restrictions affecting water availability on the Stratton source of supply.

Physical Availability

Recharge of the Stratton Pond will occur in two ways – by seepage flow and by direct precipitation. According to Mr. Stratton the pond completely fills each rainy season and then slowly diminishes during the dry season.

Impairment

As stated on page 5, there are no other water rights associated with the subject surface water source. However, there is a possibility this source could be hydraulically connected to neighboring wells and/or springs in the Raccoon Point vicinity (to the northeast). Determining connectivity is extremely difficult in bedrock geology. Water movement occurs only through untraceable and often highly disconnected cracks and fractures. However, because this request is essentially non-consumptive and the pond has already been in place for many years, no impairment of other rights is anticipated.

Beneficial Use

Recreation, beautification, and wildlife enhancement are considered to be beneficial uses under RCW 90.54.020(1). The volume of water requested (0.56 acre-feet) for storage is reasonable for the proposed purposes of use.

Public Interest

No potential for detriment to the public interest could be identified during the investigation of this application.

FINDINGS

As a result of my investigation and determinations, I find the following:

- Water is both physically and legally available.
- There will be no impairment of existing rights.
- The use will be beneficial and the approved storage volume is reasonable.
- There will be no detriment to the public interest.

RECOMMENDATION

Based on the above investigation, determinations, and findings, I recommend the subject application be approved, within the limitations listed below, and subject to the provisions on page 2.

Storage Volume

The amount of water recommended (0.56 acre-feet) is the maximum volumetric storage limit.

Report Continued

Purposes of Use

Recreation, beautification, and wildlife enhancement (year-round)

Location of Impoundment Structure

SW¼ SE¼ within Section 17, Township 37 North, Range 1 West, W.M.

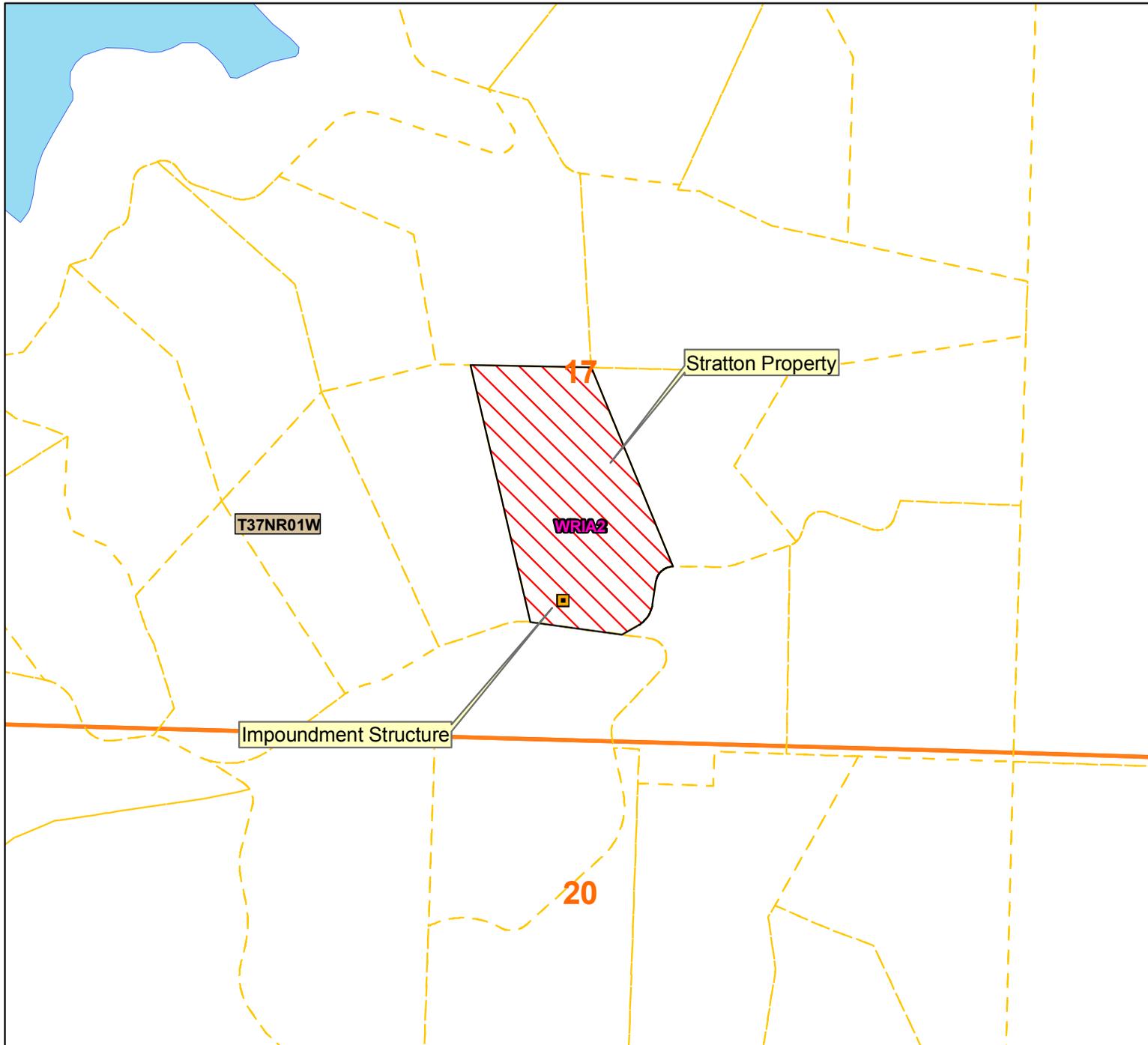
Place of Use

As described on page 1 and as shown in Attachments 1 and 2.

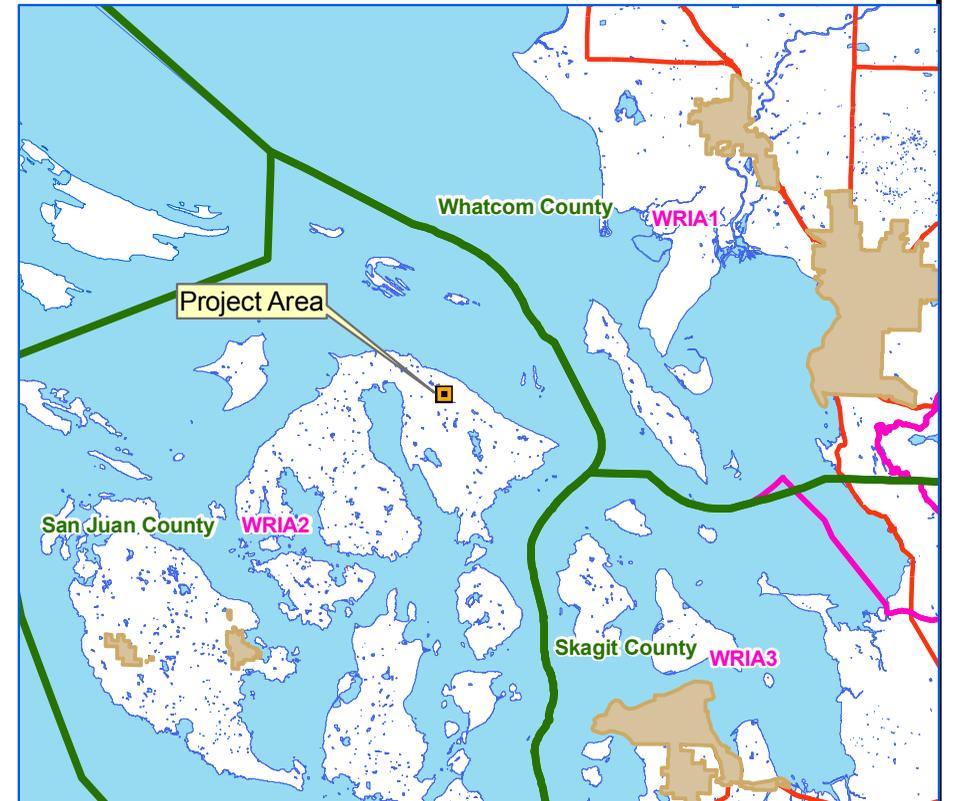
Report by: _____ February 26, 2009
Buck Smith, LG, LHG Date

Licensed Geologist/Hydrogeologist No. 1479

If you need this publication in an alternate format, please call the Water Resources Program at (425) 649-7000. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.



Stratton Family Trust
 Water Right Number R1-28468
 Sec. 17, T 37N R 01W W.M.
 WRIA2 - San Juan County



Legend

- County
- WRIA
- cities
- Highways
- Local Roads
- Townships
- Sections
- Impoundment Structure
- Stratton Property

Place of use and point(s) of diversion/withdrawal are as defined on the cover sheet under the headings, 'LOCATION OF DIVERSION/WITHDRAWAL' and 'LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED.'

Attachment 2

Buck Moun. in Tract No. 1

Parcel No. 171750084 (Orcas Island
San Juan County)

Please see descriptive cover letter.

