

Special Purpose District

RACE LAGOON HEIGHTS ASSOCIATION

P.O. BOX 20

COUPEVILLE, WA 98239

I.) District Profile

The Race Lagoon Heights (RLH) Association is a non-profit community-owned water supplier formed in 1987 with a mission of providing clean, safe, and reliable water service to its customers. The RLH Association is governed by an elected seven-member Board and is staffed entirely by volunteers. Professional services are contracted for on a case-by-case basis when the membership cannot perform the needed services or when certification is required. The RLH Association serves 76 homes in the area of Race Lagoon in the unincorporated area south of Coupeville, Island County. The RLH Association operates two wells, one reservoir, three pressure tanks, and a distribution system consisting of 6" mains, with 4" and 2" feeders in addition to private hydrants for fire protection. The RLH Association bills every three months and delivers over 3 million gallons of water annually. In conjunction with water delivery, the RLH Association maintains and repairs 3 miles of streets in its service territory. The RLH Association is totally supported by annual dues and monthly water usage fees.

1.) Land Area owned

Three small plots contained within the area served totaling less than ½ acre. Identified as "A" (Reservoir and Pump House #1), "B" (Well House) and "C" (Pump House #2) on Outline of Area Served (Paragraph II.)

Land area served

The land area served is described in legal documents as:

Government Lot 3, Government Lot 4, and Government Lot 5 in Section 7, Township 31 North, Range 2 East, W.M., Island County, Washington. Also the Southwest ¼ of the Southeast ¼ of said Section 7; also the West ½ of the Southeast ¼ of the Southwest ¼ of said Section 7; also the Benjamin Welcher and the Delos Welcher Donation Land Claims in said Section 7 except County Road. Also except that portion thereof described in that deed recorded March 17, 1972, under Auditor's File No. 248722, records of Island County, being Island County Short Plat 72-51. Also except that portion thereof lying East of Race Road and North of that tract of land described in that deed recorded February 19, 1980, under Auditor's File No. 365416, records of Island County. Also except that portion thereof lying within Race's Lagoon; Also except that portion thereof lying Northeasterly of Race's Lagoon; also except the Plat of HARRY RACE'S FIRST DIVISION OF RACE'S LAGOON as recorded in Volume 6 of Plats, page 31, records of Island County.

2.) List of Critical infrastructure/equipment:

1. Well House -- (2) Wells, with Flint & Walling Well Pumps Model # 6 and 7.5 HP Franklin Electric Motors, electrical equipment.
2. Pump House #1 – 1800 Gallon pressure tank, 1500 Gallon pressure tank, three (3) 5HP booster pumps, one (1) air compressor, electrical equipment.
3. Pump House #2 – 1500 Gallon pressure tank, two (2) 5HP booster pumps, one (1) air compressor, electrical gear.
4. 50,000 Gallon reservoir

3.) Value of Critical infrastructure/equipment:

\$150,000

4.) List of Critical Facilities (owned by District):

1. Well House and Reservoir
2. Pump Houses #1 and #2

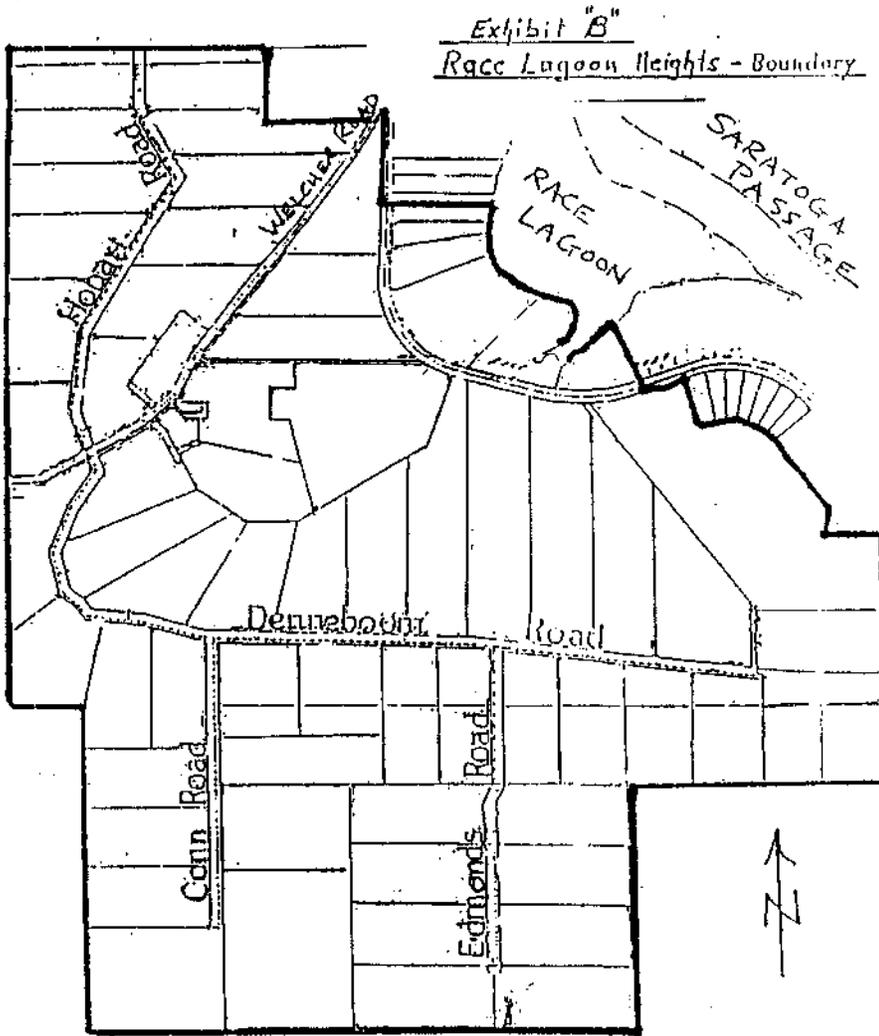
5.) Value of Critical Facilities:

\$90,000

6.) Value of area served:

From the 2006 Tax Roles, the combined value of all properties in the Race Lagoon Heights Association is \$25,592,179.00.

II.) Outline of Area served:



III.) Current and Anticipated Service Trends

The current population of the RLH Association service area is 76 homes with a potential growth to 81 homes in the future. Expansion of population beyond the 81 lots is not expected as current Island County Code does not allow further reduction in lot size.

IV.) Natural Hazard Event History

Natural Hazard Events		
Type of Event	Date	Preliminary Damage Assessment
Drought	June/Sept 2003	No physical damage
Severe Storm	4 February 2006	Loss of Power for 48 hours
Ice Storm	19 November 1996	Loss of Power for 48 hours
Earthquake	1986	Destruction of well in neighboring water association, well re-drilled

V.) Natural Hazard Risk/Vulnerability Risk Ranking

This District is most vulnerable to the following natural Hazards – ranked in order of potential occurrence.

1.) Drought

Droughts are relatively common in Washington with the most recent event for Island County occurring in 2003. During this period, RLH Association urged its members to reduce non-essential watering. Prolonged drought in the Island County could result in excessive draw-down of the aquifer and salt-water intrusion.

2.) Severe Storm

Severe storms are a common occurrence in the RLH Association and in Island County. RLH Association's water supply is obtained from wells and is thus dependent on electrical power for pumping the water. In addition, because of the location of the main reservoir, service to 63 of the homes in the service area is by pressure tanks. In past years severe storm events have created power outages of varying duration affecting wide areas of Island County. RLH Association sits on the boundary area between the two main Island County power distribution grids and has been among the last to receive service resumption due to its physical location.

3.) Earthquake

The probability of an earthquake is moderate, but as history has shown, an earthquake can produce damage in unexpected locations because of combination of factors including sub-surface composition, motion harmonics and other factors beyond the control of the local agency. RLH Association's main reservoir is a concrete, hexagonal design that has a potential for failure along the

vertical seams thus resulting in loss of stored water needed for distribution to customers and fire suppression. Prolonged service disruptions could affect RLH Association's financial resources.

VI.) Existing Applicable Hazard Mitigation Codes, ordinances or policies

RLH Association is a private, not-for-profit organization and has no codes or ordinances. The association complies with Island County and Washington State building codes, fire codes, and health regulations regarding water production, treatment, and storage.

VII.) Existing applicable Natural Hazards Mitigation Associated Plans and / or documents.

An emergency response and restoration of service plan for the association's water utility is currently in development.

VIII.) Proposed Natural Hazard Mitigation Initiatives

No.	Mitigation Initiative	Administrating Agency	Funding Source	Time Line
1	Emergency Response Plans	RLH Association	Self-funded	In development
2	Acquire back-up generator	RLH Association	Rural Development Assistance Grant or other	2-3 years
3	Acquire replacement/alternative reservoir	RLH Association	Rural Development Assistance Grant or other	5 years or longer

IX.) Benefit/Cost Review of mitigation Initiatives:

Initiative 1. The benefit to cost of this initiative is rated as **high** given that the cost is minimal, the expected product will provide plans, and instructions that will minimize costs to the association, reduce or prevent loss of water service in the future, and further determine actions that are required to protect the water utility and service.

Initiative 2. The benefit to cost of this initiative is rated as **high**. This is an immediate and cost effective measure that will eliminate the most pressing hazard issue faced by the water utility – loss pumping capability during frequent and extended power outages. This relates directly to the primary natural hazard faced by the association and the county – storm and wind related damage and power outages.

Initiative 3. The benefit to cost of this initiative is rated as **medium** based on the current number of water connections and the maximum number of connections allowed. A new reservoir would provide better fire flow capability in the system. A second reservoir would become more cost effective if average water usage increased or more water was required to be stored due to lower pumping rates.

Explanation of priorities

Priority #1, development of Emergency Response Plans, is essential to the Association's responsiveness to its membership. The current dependence on specific individuals within the association whom have the knowledge and skill sets necessary to maintain the water system is untenable for the long term. This plan development will allow the gradual implementation of an "organizational skill-set" such that multiple individuals can operate the systems in an emergency.

Priority #2, acquisition of back-up generator, is the main RLH Association priority. In the last two years there have been three power outages that caused the association to lose the ability to service its customers. Those outages were not all due to severe storms, one being caused by an errant driver hitting a power pole. The majority of our membership is serviced by pressure feed rather than gravity feed and is immediately impacted by loss of power.

Priority #3, replacement or alternative reservoir, is a longer-term initiative that will benefit the Association as well as other governmental agencies in Island County. The addition of stand-pipes to the reservoir during the replacement of or installation of an alternative reservoir will allow local fire departments to draw water from the reservoir during an emergency.

X.) Future needs to better understand risk/vulnerability:

Unknown at this time.

XI.) Additional Comments:

None