22

23

04/03/98 BB:pr a98-2:07ord

Introduced By:

GREG NICKELS

clerk 4/17/98

Proposed No.:

98-273

ordinance no. 13505

AN ORDINANCE approving the Westside Water Association Comprehensive Water Plan.

#### PREAMBLE:

K.C.C. 12.24 requires approval of comprehensive plans for water utilities as a prerequisite for granting right-of-way franchises and approval of right-of-way construction permits.

The Board of Directors of the Westside Water Association approved the Comprehensive Water Plan (Plan) on January 8, 1998.

The King County Utilities Technical Review Committee reviewed and conditionally approved the Plan on March 11, 1998. The conditions of approval (submittal of additional information) have been met by the Association.

The Plan is categorically exempt from the State Environmental Policy Act because no pipe in the system is larger than eight inches in diameter (197-11-800 (24) (b) WAC).

The UTRC recommends that the Council approve the Plan.

# 13505 \*

1	BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:
2	SECTION 1. The Westside Water Association Comprehensive Water Plan,
3	Attachment A, is hereby approved without conditions.
4	INTRODUCED AND READ for the first time this $27^{7}$ day of
5	<u>april</u> , 1998.
6	PASSED by a vote of 12 to 0 this 17 day of May
7	19 <u><b>99</b></u> .
8 9	KING COUNTY COUNCIL KING COUNTY, WASHINGTON
10 11	Denie Miller Chair
12	ATTEST:
13 14	Clerk of the Council
15	APPROVED this $27$ day of $1999$
16 17	King County Executive
18	Attachments:

A. The Westside Water Association Comprehensive Water Plan.

19

# WESTSIDE WATER ASSOCIATION COMPREHENSIVE PLAN 1998

Update of 1987 Comprehensive Plan prepared for the Board of the Westside Water Association by Douglas P. Dolstad of Island Water Management.

Acknowledgments to present and former WWA Board members:

Terry Jansen
Jim Garrison
Jay Hansen
Mike Wagner
Steve Rubicz
Laura Leonard
Jim Carstairs
Jack Dolstad

#### WESTSIDE WATER ASSOCIATION PO BOX 267 VASHON ISLAND, WA 98070

## **APPENDIX B**: RESOLUTION OF THE BOARD OF THE WESTSIDE WATER ASSOCIATION APPROVING 1998 COMPREHENSIVE PLAN

A RESOLUTION of the Board of directors of the Westside Water Association authorizing the submittal of the 1998 WESTSIDE WATER COMPREHENSIVE PLAN to the King County Technical Review Committee; and , adopting said Plan to serve as a framework for the operation and development of the Westside Water Association through the year 2003.

WHEREAS, Westside Water Association is a legally constituted water utility operating under the laws of the State of Washington; and.

WHEREAS, the Board of directors recongnizes the requirement to have an approved Comprehensive Plan in effect for the purposes of satisfying state and local laws; and,

WHEREAS, the Board of Directors recognizes the requirement to have an approved Comprehensive Plan as a precondition for renewing a utility franchise in King County; and,

WHEREAS, the 1998 Comprehensive Plan satisfies these requirements; and,

WHEREAS, the 1998 Comprehensive Plan provides a framework for the operation and development of the water system,

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE BOARD OF DIRECTORS FO THE WESTSIDE WATER ASSOCIATION TO ADOPT THIS 1998 COMPREHENSIVE PLAN.

PASSED by the Baord of Directors of the Westside Water Association at a regularly scheduled meeting held on this 8th day of January, 1998.

BOARD OF DIRECTORS OF WESTSIDE WATER
ASSOCIATION )
By: BAMUM
Terry Jansen, President
By: James K. Hann
James Garrison, Vice President
By: Mike Wayner
Michael Wagner, Secretary
By: Jay Hanson
Jay Hanson, Treasurer
By: Steve Rubics
Steve Rubicz

KING COUNTY UTILITIES TECHNICAL REVIEW COMMITTEE CHECKLIST	4
UTILITY NAME	4
TYPE OF PLAN	4
UTILITY CONTACT PERSON	4
I. BACKGROUND INFORMATION	5
A. Reason for Submittal	5
<ul> <li>B. Capacity:</li> <li>1. Existing</li> <li>2. Obligation</li> <li>3. Source Capacity</li> <li>4. State Department of Health Approved</li> </ul>	5 5 5 5
C. Size of Largest Pipe	5
D. Community Planning Area	5
E. Plan Approved by Utility	5
F. Environmental Review (Chapter 197-11 WAC)	5
G. System Group (Chapter 246-290 WAC)	5
H. Critical Water Supply Area	5
I. Ground Water Planning Area	5
II. NARRATIVE REPORT	6
A. Short History of Utility	6
B. Population Projection: Source or Basis of Projection	6
C. Water Supply and, D. Water Demand (expressed in MGD)	7
E. Forecast Needs (MGD)	8
5. Water Rights Certificates	8 9 9 10 10

G. Fireflow Planning	11
<ul> <li>H. System Improvements</li> <li>1. Review of Previous Capital Improvements from 1987 Plan</li> <li>2. Needs Assessments (5 year projection)</li> </ul>	12 12 12
I. Water Conservation Leak Detection Program Public Education Program Inverted Rate Structure Water Shortage Response Plan Summary	13 13 14 15 15
J. Satellite System Management Plan	16
K. Wellhead Protection Program	16
L. Improvement Schedule 1Financing plan	. <b>17</b>
M. Adjacent Utility Issues	17
N. Cross Connection Control	18
O. Consistency With Other Plans and Policies	18
II. MAPS	22
APPENDICES	
Appendix A: Cross Connection Control Policy	

Appendix B: Water Right Documentation

#### King County Utilities Technical Review Committee Checklist

#### **Utility Name**

Westside Water Association

#### Type of Plan

Water, Comprehensive Plan

#### **Utility Contact Person**

Douglas P. Dolstad

#### **Title**

Manager

#### **Address**

Island Water Management PO Box 13333; Burton, WA 98013

#### **Phone**

206-567-4568

#### I. Background Information

#### A. Reason for Submittal

Update

#### B. Capacity:

#### 1. Existing

226 connections

#### 2. Obligation

234

#### 3. Source Capacity

.158 MGD

#### 4. State Department of Health Approved

227 connection

#### C. Size of Largest Pipe

The largest pipe diameter is 8"

#### D. Community Planning Area

Vashon-Maury Island

#### E. Plan Approved by Utility

This plan was approved by the Board of the Westside Water Association at it's regular meeting on January 8th, 1998. (See Resolution)

#### F. Environmental Review (Chapter 197-11 WAC)

This plan is categorically exempt from SEPA rules as the largest pipe size measures eight inches or less.

#### G. System Group (Chapter 246-290 WAC)

Westside Water is a Group A system

#### H. Critical Water Supply Area

Vashon-Maury Island

#### I. Ground Water Planning Area

Vashon-Maury Island

#### II. Narrative Report

#### A. Short History of Utility

The Westside Water Association (WWA) service area is located in the Colvos area near the northwest corner of Vashon Island. The Association's service area is bordered on the west by Colvos Passage, to the north by Fern Cove, to the east by the Cedarhurst Canyon and to the south by Cove Road. The water utility was first organized as a nonprofit corporation in September 1928. Owned by its share holding members, WWA was developed to provide potable water supplies to approximately 20 farms and homes located in the Colvos area. A small dam on Shinglemill Creek, a tower on what has become 156th SW, and distribution pipeline were installed at that time. The utility's water right was amended in 1964 from the original .05 cfs to 2.0 cfs to serve the growing population. At that time, the Association was providing water to 130 metered connections.

In 1971 WWA commenced an improvement program which included development of a 100,000 gallon storage reservoir on Cove Road, source redevelopment and service improvements.

In the aftermath of disastrous floods in the late 1980's which destroyed the dam and pump house along Shinglemill Creek, WWA (with assistance from FEMA) built a new pumping facility, installed flood mitigation structures and refurbished its spring sources. In 1989 a 156,000 gallon steel storage reservoir was added to replace the old wooden tower on 156th SW and 4000' of 4" line was replaced with 8" line to meet fireflow needs of the Island Christian school located in Bethel Park.

In the spring of 1993 the WWA Board of Directors contracted with Island Water Management (IWM) to provide comprehensive management and operations services for the Association. Today WWA has 226 connected shareholders and 8 shareholders not yet connected. To provide more reliable service a cartridge filtration system was installed in 1995 to augment water supplies during the summer.

#### B. Population Projection: Source or Basis of Projection

All of Vashon-Maury Island was designated a Rural Area in the 1985 King County Comprehensive Plan and rural zoning was applied through the Vashon Community Plan and Area Zoning in 1986. The Rural designation was reaffirmed in the 1994 King County Comprehensive Plan. Although development subsequent to the '86 Community Plan has conformed to the adopted policies, population has grown faster than expected. When the Vashon Community Plan was prepared, the planning area had about 7,800 people with

forecasts of 8,400 people in 1990, and about 10,800 by the year 2000. The 1990 Census, however, indicated a planning area population of 9,300, and the Washington State Office of Financial Management estimated the 1993 population at 9,900. While the available water supply for Vashon-Maury Island could sustain an estimated population of 13,200 people, adopted zoning would allow more than 20,000 residents in the planning area. The combination of increased demand and the adverse effects of development on the aquifer (contamination and/or reduced recharge) could result in an inadequate water supply with consequent threat to public health and safety<sup>1</sup>. Although **R-105** of the KC Comprehensive Plan indicates a 7,000 dwelling unit increase in the Rural Areas of the County, the Growth Management Act requires the county's entire growth target to be accommodated within the Urban Growth Area (UGA) none of which includes Vashon-Maury Island. Furthermore, R-105 clearly indicates the growth target of 7,000 dwelling units shall "...be used only to assess possible impacts of growth on public services and the environment. It is neither a minimum growth goal nor a maximum growth limit for the Rural Area, nor does it represent a commitment by King County to provide public facilities and services to accommodate a specific level of growth there."

WWA is fully subscribed and is not obligated to serve new development in its Planning Area nor is it capable given its storage and distribution capacities. There are presently 8 shareholders who have yet to connect to the distribution system and there are no water shares available.

#### C. Water Supply and, D. Water Demand (expressed in MGD)

Table 1. Westside Water Association Yearly Statistics 1990-1996

Year	Usage (MGD, ADD)	Water Supplied (MGD,ADD)
1990	.0415292	.0618503
1991	.0431933	.0567742
1992	.0447008	N/A (meter broken)
1993	.0411453	.0668168
1994	.0426928	.0571205
1995	.0439917	.0560836
1996	.0471138	.0513066

<sup>&</sup>lt;sup>1</sup>1994 King County Comprehensive Plan, page 37

#### E. Forecast Needs (MGD)

Westside Water Association is fully subscribed. There are 8 shareholders yet to connect to the distribution system. Due to other developmental restrictions several of these water shares are unlikely to be utilized. The Association has been buying back unused shares over the past few years. Since 1993 4 shares have been repurchased by the Association. Though the Association's water right confers ample supply to provide for more connections than at present doing so would require cost prohibitive surface water filtration technology.

#### F. Water System Description

Westside Water utilizes a variety of sources to meet its normal and seasonal needs. During the 9 months of the year from September to June the flow from the springs and well points are sufficient unto the needs of the users. To insure both a high quality and a sufficient quantity of water during the summer season a cartridge filtration system was installed during the late summer of 1995 and used throughout the summer of 1996 to filter "surface springs" and/or the waters of Shinglemill Creek depending upon demand requirements.

#### 1. Sources

#### Springs

Sources SO 1 and SO 2 are springs located along a tributary to Shinglemill Creek. Their flows are  $\sim 5$  gpm and 12 gpm respectively

#### Well Points

Source SO 3 consists of a series of well points producing  $\sim$  30 gpm. This flow can be increased to 35 gpm when a suction pump is employed.

#### Surface springs/Shinglemill Creek

#### Filtration

A two stage filtration plant provides high quality water during seasonal shortfalls and emergency situations. The source, SO4, consists of a 6' diameter steel casement set 10' into the stream terrace. Into this casement flows sand and gravel filtered stream water. Several springs also flow either into the casement or through a casement by-pass enroute to the filter. The system is configured to utilize any or all of the various sources as need arises starting with the most protected springs and reserving the stream for extreme situations.

The filter is undergoing a pilot project with the results of the first full summer's use looking favorable. The filter consists of 2 stages containing 3 vessels each for processing water. The initial stage uses a 15 micron 3M bag filter. The second stage employs a 5 micron cartridge filter.

#### Watershed restrictions and conditions

The Association owns 40 acres of the watershed around the sources. There are significant development restrictions and limitations imposed by King County on adjacent lands. 5 acre zoning is in effect. The watershed itself is remarkably intact and undisturbed.

#### Programs for Control

There are no official programs for control of the watershed. In cooperation with the Vashon-Maury Island Land Trust the Association has held several meetings of watershed land owners to discuss watershed issues with a particular emphasis on water quality. A booklet about the Shinglemill watershed has been produced by the Land Trust and with financial assistance from WWA is being distributed to every land owner within the watershed boundary. There is also a private non-profit organization, The Friends of Fern Cove, who were able to put the 15 acres of the mouth of Shinglemill Creek into public ownership and who continue to contribute to the public education of watershed issues in the drainage basin. As an organization they are working with the Land Trust and Westside Water to develop a watershed awareness program which may include a "StreamKeeper" similar to the Puget Sound Keeper program. There are already individuals who care deeply about the watershed and report any concerns to either the Land Trust or WWA. "Control" has been informal and community based and continues to grow in influence within the community

#### 2. Ownership

WWA is owned by its members.

#### 3. Storage and Distribution Facilities

Currently the Association has a 100,000 gallon covered concrete storage tank situated at the top of Cove Road(SW 168th) serving the residences on Cove Road and 115th SW and a 156,000 gallon covered steel storage tank located on SW 156th which supplies users to the north and west of the system. The tops of both tanks are at an elevation of 460' and were built in 1973 and 1989 respectively. The concrete tank is designed to supply water with pressure induced by a booster pump to residences in the upper part of the service area.

The concrete tank is in series with the steel tank although the piping to and between the tanks is configured in such a way that either tank could supply the entire system should the need arise and source water can be directed to either tank. Normally, to insure sufficient CT values source water is pumped from the source to the steel tank on demand. Water is then fed by gravity to users to the north and west of it and, upon a call for water from the concrete tank, by means of a booster pump which keeps the pressure in upper elevation area above 30 psi while the concrete tank is filling.

Source water flows under the influence of gravity and collects in a 15,000 gallon buried fiberglass tank. One of two vertical turbine water pumps mounted over that tank deliver water to the storage tanks upon a call for water at a nominal rate of 150 gpm. In addition to these two pumps which alternate in their duty cycles there is a third standby turbine pump located in a reserve pump house which has a holding capacity of  $\sim$  7500 gallons. Overflow from the primary source holding tank is directed to the reserve tank and thence through its overflow into Shinglemill Creek.

Source water is chlorinated at a point just downstream from the turbine pumps. In this way there is no chlorinated overflow into Shinglemill Creek. The chlorination pump and solution tank are located in the main pump house.

The distribution system includes 5000′ of 8″ PVC line; 15,000′ of 4″ AC and steel pipeline; 1300; of 3″ steel line; and some 6700′ of 2″ extensions of varying material. Lateral service connections may be 3/4″, 1″,1-1/4″ or, 1-1/2″ depending upon the residential preference. Copper, galvanized steel, and PVC materials have been used for this purpose.

#### 4. Water Quality Documentation

The primary objective of the Westside Water Association is to provide a reliable supply of safe water in a cost effective manner. It is the expectation of the Association the supplied water will comply with chemical, physical, and bacteriological standards as defined in WAC 246-290.

Bacteriological tests and a series of chemical tests are performed to assure that the objective is accomplished. The testing of these water samples is done by an approved testing laboratory and submitted to DOH for review. The schedule of water sampling required by the State for a this system is:

- 1. One bacteriological sample per month
- 2. One inorganic chemical analysis of untreated water every three years
- 3. One organic chemical analysis of untreated water every three years
- 4. Yearly nitrate sample
- 5. Other tests e.g. lead/copper, radionucleid, asbestos etc. as required

#### 5. Water Rights Certificates

(See Appendix B)

#### 6. Emergency Planning

#### **Emergency Power**

In the event of a power failure, the storage facilities can supply water via gravity for an estimated 2.5 - 7 days at a normal usage pattern depending upon the season and 5 - 10 days with conservation measures in effect. There is some potential for low pressures on a small part of the upper system (Cove Road) during power outages. This situation has been mitigated by being able to use the booster station on SW 156th in lieu of the Cove Road station when necessary. In the event of a prolonged power outage WWA has contracted with Aggreko Company (a major disaster relief company) for an emergency generator to be brought to any or all stations requiring power. These power plants can be on site and operational within 10 hours. The Association does not have the financial resources to purchase and maintain standby generators and the arrangement with Aggreko provides a reasonable alternative should the need arise - which, incidentally, it never has.

#### Interties

WWA is not physically connected to any other water utility. The nearest practical intertie would be with a 8" ductile iron water main lying 1400' eastward along Cove Road from 115th SW which is owned and maintained by KC Water District #19. Given the financial constraints of the Association, the priority of other projects and considering the politics involved with connecting in any way to WD #19 the Board of the Association does not intend to pursue this project.

#### Public notification

In the event of an emergency situation a listing of users has been divided amongst the Board of WWA and the bookkeeper for the purposes of a telephone notification system. Sign boards are also posted notifying users of a "Water Emergency" or in less severe cases a, "Water Alert". These boards carry a telephone number through which users can listen to a recorded message describing the situation and what part of the system is affected as well as an emergency contact number of the pager carried by the water system management company (IWM). Less critical notifications are carried out by US Mail and articles in the local weekly newspaper.

#### G. Fireflow Planning

WWA is served by Fire District #13. The service area is designated a rural area and is, with the exception of the Island Christian School located in Bethel Park, exempt from KCC 17.08<sup>2</sup>. Although exempt from fire flow requirements all

<sup>&</sup>lt;sup>2</sup> Vashon CWSP IV-13

purveyors are subject to fire flow storage requirements<sup>3</sup>. This storage capacity is accounted for in the system's total storage capacity which is in excess of the required storage (253,000 g vs. 186,806 g). As for the Island Christian School, that area is served by an 8" main with appropriate fire hydrants.

#### H. System Improvements

#### 1. Review of Previous Capital Improvements from 1987 Plan

WWA has completed most of the capital improvements outlined in the 1987 Comprehensive Plan. These include:

- 1. The completion of a new pump house with two vertical turbine pumps and a 15,000 gallon fiberglass holding tank,
- 2. The replacement of 4000' of 4" steel line serving SW 156th, 119th SW and Bethel Park with new 8" PVC and installation of fire hydrants to meet fire conditions for the Island Christian School, and,
- 3. The construction of a new 156,000 gallon steel storage tank The 6" line proposed for SW 148th was reprioritized in light of a change in fire flow requirements that obviated a need for a looped system and in recognition a filtration plant would have to be secured to insure a reliable source of high quality water to users.

In addition to the capital improvements listed in the 1987 plan there have been several substantial projects undertaken by the Association.

- 1. At the source pumping station, the old 480 volt open delta (floating ground) electrical transformers have been replaced by the standard (and grounded) Y transformers.
- 2. All the control circuitry has been redesigned, upgraded and relocated to the "new" pump house at the source pumping station.
- 3. An in-line filtration plant has been installed to take advantage of available springs and/or surface water as seasonal needs arise,
- 4. The storage tanks and associated pumping stations have been reconfigured so as to make it possible for either storage tank to supply the entire system should the need arise.

#### 2. Needs Assessments (5 year projection)

WWA is not an expanding system and is fully subscribed. Therefore no new sources are anticipated being needed nor is there a need for increased storage capacity. There is a need to replace the third standby turbine pump in the old pump house which is scheduled for the summer of 1998. A watershed management plan is important to have in place as is a scheduled program for replacing existing pipelines and an on-going water conservation program.

#### I. Water Conservation

WWA has adopted an aggressive approach to water conservation. In the face of an increasing demand as more outstanding shareholders connected to the system the decision between obtaining more source for the membership and becoming more efficient with existing quantities was unanimously decided in favor of the latter for financial and ethical reasons. The following is the process WWA used to recover and conserve water:

#### **Leak Detection Program**

#### Review of system records

The process started in late 1993 with the management company reviewing the existing records to determine: the number of shareholders actually connected to the system; the number of outstanding unconnected shares; and, source vs. metered use data. This analysis indicated an average unmetered loss of water in 1991 of 23,000 gpd or as much as 48% of the pumped volume during the non summer months.

#### Calibration of master meter

To eliminate instrument error as a variable the master meter was temporarily removed and calibrated.

#### Leak detection program

Post calibration recordings confirmed significant losses of water in the distribution system. The Association then implemented phase 2 of the plan which involved:

Installation of branch line leak detection meters

Branch line leak detection meters were installed on all branches of the system. These were installed around branch line valves or in line where appropriate. The locations of these meters are:

- 1. Bethel Park
- 2. SW 156th booster pump station (meter for upper system)
- 3. Olympic View Drive
- 4. SW 144th (in line)
- 5. D.A. Colman Road (Cedarhurst) at the northern extreme before the line drops down into the Shinglemill floodplain.
- 6. SW 148th & Westside Highway (in line)
- 7. SW 151st & Westside Highway (in line)
- 8. SW 158th

#### Professional leak detection services

Once significant sections of the system were isolated and leaks in those sectors was either confirmed or eliminated WWA contracted with Utility Service

Association Inc. to use their sophisticated sonic equipment to locate leaks with greater accuracy. The first visit (8/31/94) identified about 12,672 gpd worth of leaks mostly on service lines. This visit took 6.5 hours and cost the system \$1100.00.

USA Inc., was contracted again (on an hourly basis) a little more than a year later to survey the upper system where the branch meter was indicating an unacceptable loss of water. USA Inc. was not as successful this time though a by pass leak in the valve at the 156th booster pump station was identified as a "ghost" leak. This valve was tightened and a hydrant valve was positively shut off as a result of this survey. During the summer of '95 the source of the unaccounted for water was found to be a leaking service saddle under Cove Road. IWM promptly repaired the saddle.

#### Relocating service meters

As a result of the USA work several service lines serving multiple residences were replaced. Individual lines were run to the residences and the meters relocated to just inside the property line near the main or nearest public right of way in accordance with the policies of the Association.

#### Change out of customer meters

Although WWA is fully metered it had been years since any meters had been replaced on the system. IWM is now replacing about 5% of the meters a year.

#### **Customer Notification**

The meters are read every other month. Any unusual recordings are double checked and, if verified as unusually high, the resident is notified usually by phone by IWM.

#### Public Education Program

#### General

Over the past decade there has been much public exposure and a heightened awareness of issues relating to the water quality and quantity on Vashon Island as a result of several studies pertaining to the island's water resource. Public education began in earnst with the 1986 Vashon-Maury Island Community Comprehensive Plan. This plan was the first resource based community plan in the state (using the Carr Report) -and recommended limiting the Island's population growth. Next came the Vashon Coordinated Water System Plan. Vashon-Maury Islands were subsequently designated as Sole Source Aquifers. Most recently a lengthy Ground Water Management Study has been working its way through the bureaucratic layers. The effects of the GWMP if adopted by the KC Council will have far reaching implications on water quality and quantity.

#### Informal

By far the most effective strategy for users of this system is one on one consultation between WWA and/or its agents with individual users. Water conservation is always a topic at the annual meeting.

#### **Inverted Rate Structure**

WWA has had an inverted rate structure for some time. During 1995 a detailed analysis of usage patterns revealed a discrepancy between who was using the most water and the proportion they paid to support the system. On May 16th the Board adopted a revised rate schedule to equalize the financial responsibility and discourage waste. This rate schedule revision is shown in the following table:

#### BI MONTHLY RATE -DOLLARS (Per hundred Cu Ft)

Consumption - Cu ft	Present Rate	New Rate	Per Cu. Ft
1-600	\$26.00	\$26.00	0.04333
601-1000	0.65	0.65	0.0065
1001-2000	1.00	1.00	0.0100
2001-5000	1.30	1.30	0.0130
5001-10,000	1.30	2.00	0.0200
10,001 or greater	1.30	3.00	0.0300

#### Water Shortage Response Plan

When water consumption exceeds the capability of the normal sources, the filtration plant is brought on line. Should a catastrophic situation develop (e.g. forest fire) it is possible to withdraw stream water directly from the source and employ both pumps simultaneously to pump as much as 300gpm to the storage reservoirs. Before the filtration plant went on line stream water was used and residence were advised to boil their water. A flyer was hand delivered to each residence, a "Boil Water" notice was put out at each end of the system, and, a recorded message was left on the system telephone to inform residence of the status of the situation. The local newspaper is a late notification strategy as it only comes out once a week. An article usually appears eventually...

#### Summary

The conservation strategy employed by WWA has been very effective. Unaccounted for water loss has dropped from an average of 23,000 GPD to 3000 GPD or, from 48% to 5.4% during the non-summer season for which records are most recently available. A WWA Conservation Target table describes the results of the conservation strategies.

#### WWA CONSERVATION TARGET TABLE (gpd/per capita)

Year	Target	WWA Water Supplied (master meter)	Percent Reduction (vs. 1991)	Vashon Community <sup>4</sup>	WWA Water Usage (individual meters)
19915	Baseline	115	X	120.0	87.52
19966	110.4	96.60	16%	115.2	88.71
$2000^{7}$	108.1	N/A	N/A	112.8	N/A

As can be seen from the table WWA has already exceeded its targeted conservation goals even through the year 2000. The strategy is to remain vigilant in leak prevention, detection and repair. As the per capita demand is already much lower than the Vashon community as a whole and surpasses the conservation goals the Association feels it is behaving responsibly with its present approach. Furthermore note the % differential between system supplied and individually metered connections. In 1991 the gap was 24%. In 1996 the gap had shrunk to 7.2% (Average Daily Demand - ADD)

#### J. Satellite System Management Plan

N/A

#### K. Wellhead Protection Program

WWA owns outright 40 acres of the watershed in which their source is located. The watershed itself is heavily forested and very little impacted by development. There are no residences along the immediate watercourse. Adjacent land use is limited to 5 acre zoning and is predominantly pasture land or wooded. There are no residences within the zone of impact as determined by the Susceptibility Assessment conducted recently by the Association. Present Association policy encourages reduction in growth pressure from within the service area. WWA has pursued financing to undertake a watershed protection study with other purveyors on the island in cooperation with KC Water District #19. Unfortunately the grant submitted by WD #19 was not funded. Other avenues are being pursued including securing funding through the recommendations of the Ground Water Management Plan which has yet to be authorized by the King Count Council.

<sup>4</sup>Vashon CWSP; Table II-2, p. II-8

<sup>&</sup>lt;sup>5</sup>210 connections. (= 493.5 population at 2.35 persons per connections Ref.: Vashon CWSP op cit.)

<sup>6226</sup> connections, (=531.1 population served)

<sup>&</sup>lt;sup>7</sup> 232 connections, (=545.2 population served; assumes 100% obligation with two shares being returned to the Association which seems likely given the unbuildable nature of the lots involved.

#### L. Improvement Schedule

Item	Name	Cost (Estimated)	Schedule	Status
1	151st service meter relocation (7 meters + 3500' line)	\$2,000	1997	Completed 1997
2	148th main (relocation)	\$20,000	1998-1999	90% 1997
4	Cove Road Main Replacement	\$45,000	1997-2000	30%. 1997
5	Repair Old Pump House	\$6,000	1998	$\epsilon$
6	SO4 spring box replacement	\$2,000	1998	
7	Replace #3 Source Pump	\$6,000	1998	

#### 1.. Financing plan

WWA operates on a cash basis. For the past 10 years WWA has carried no outstanding mortgages. All capital expenses are paid for from an on-going capital improvement assessment which is presently \$10/shareholder/month. An emergency cash reserve, a capital improvement fund and an operations and maintenance account exist to serve the system.

#### M. Adjacent Utility Issues

WWA has no formal agreements or interties with any of the other water purveyors, public or private to provide or receive water. To the northeast but not contiguous is Heights Water Company. Southeast of Westside's service area is King County Water District #19, which serves the town of Vashon and is the largest water purveyor on the Island. KC WD #19 is also not contiguous with Westside Water Association. Discussions of water transfer agreements or interties have been considered through meetings of the Vashon Water Utility Coordinating Committee (WUCC) but nothing substantive has emerged from those meetings or subsequent to them.

Several Class B systems are scattered along the southwestern boundary of the service area and there are both approved and unapproved well and spring systems serving individual residences. The likelihood of either a formalized agreement or of abandonment of these small systems by their owners is remote.

An Interlocal agreement was drafted and signed off on by Westside's Board of Directors as one of Vashon and Maury Island's larger water purveyors to "...establish responsibilities and provide for local funds in the event a grant is offered by the Washington State Department of Ecology to prepare Wellhead Protection Plans for the restricted area of Vashon Island, a federally designated SOLE-SOURCE AQUIFER area" As mentioned earlier, this grant request was not funded.

#### N. Cross Connection Control

The Association recognizes its responsibility to provide water to its users that meet safe water quality standards and to prevent the contamination of the public water supply. A cross connection control program is being implemented to identify potential cross connection situations, prioritize them as to the degree of health hazard they represent and, finally, to eliminate the threat they imply. Virtually all the connections on the Association's distribution system are of a residential nature. It has been the practice to install a "meter check" for all the residential connections as a means to provide an extra degree of protection from the hazards posed by single family residences where specific health hazards have not been identified. There are several residences with auxiliary well systems. The Association is working with these people to resolve the cross connection potential these wells represent. (See Appendix A for Cross Connection Policy)

#### O. Consistency With Other Plans and Policies

WWA's operations are consistent with the policies in the Vashon Community Plan, the Vashon Coordinated Water System Plan and the 1995 King County Comprehensive Plan as they relate Group A water systems.

Pertinent Vashon Community Policies include:

- V-52 WWA obtains and expects to continue to obtain all of its water from resources on the island. The current water resources consist of shallow-driven well points, springs and Shinglemill Creek.
- V-53 Property development is largely low density residential structures as per existing zoning regulations that designate most land as low-density residential use: AR-5-P, AR-10-P, and AR-2.5-P. Source of zoning designations is the 1986 Vashon Community Plan and Area Zoning.
- V-54 The land use and density controls and other factors in the Vashon Community Plan and Area Zoning will do much to protect the island's groundwater aquifer. WWA owns the land on which its water sources and storage facilities lie, and consequently protects the most vital component of its water resources above and beyond the protections offered in the Community Plan.
- V-55 WWA is committed to using water resources efficiently. The Association is not taking on new members in any portion of its service territory.
- V-56 WWA is a Group A system on Vashon Island.

- V-57 Almost all of WWA's service area is designated low density residential. This low-density zoning, combined with topographic features in many areas that hinder development, suggests that the ground water recharge areas and watersheds should be protected.
- V-58 WWA is a Group A but is limited in size by its bylaws.
- V-59 The Association is fully subscribed and is not taking on new shareholders regardless of population growth within its service area. The Association is concerned that expansion could risk the adequacy of existing service, and this is part of the reason the Board has determined not to expand the system.
- V-60 WWA is fully subscribed.
- V-61 V-60 and V-61 place responsibility upon DDES and potential developers to consider effects of development on existing customers (V-60) and groundwater (V-61).
- V-62 The Association has provided information about the location of its water sources to the King County Health Department and other relevant regulators, and will provide information to any private developer who may site new housing that could impinge upon the Association's supply.

Pertinent Vashon Coordinated Water System Plan recommendations include:

#### 1. Service Area

This Comprehensive Plan seeks to clarify service area boundaries relative to the VCWSP. The Vashon Island Parks District has abandoned its claim to water from WWA when it sold its share back to the Association in 1996. The Association has decided to restrict its service area to the area it presently serves.

#### 2. New Water Systems and Utility Service Review Procedures

WWA is not, and does not intend to engage in satellite management of other systems within or adjacent to its designated service area. WWA has also lent its voice to express concern at the proliferation of private water sources and has recommended to the Vashon Groundwater Management Program to give Group A purveyors authority to review and deny private water source applications within its service area.

#### 3. Design Standards, Planning criteria and system Improvements

WWA has adjusted its planning to conform to Part IV of the Vashon CWSP. Renewal and replacement of distribution system components will meet the minimum design standards unless an exception is warranted with engineering justification.

#### 4. Future source and Groundwater Management

Westside has and is willing to make information regarding its sources available for monitoring the island's groundwater resource.

#### 5. <u>Protection of Groundwater Quality</u>

There are no specific water purveyor recommendations but WWA certainly supports the general recommendations made.

#### 6. Water Conservation

WWA has an aggressive program to reduce unaccounted for water through repair of leaking mains and facilities and close monitoring of water use records.

#### 7. Water shortage Response Planning

WWA is developing an Emergency Response Plan and has considered intertie possibilities.

#### 8. <u>Plan Updates</u>

This document satisfies the requirements of the Vashon CWSP within the Vashon Critical Water Supply Service Area.

Pertinent King County Comprehensive Plan 1994 policies are:

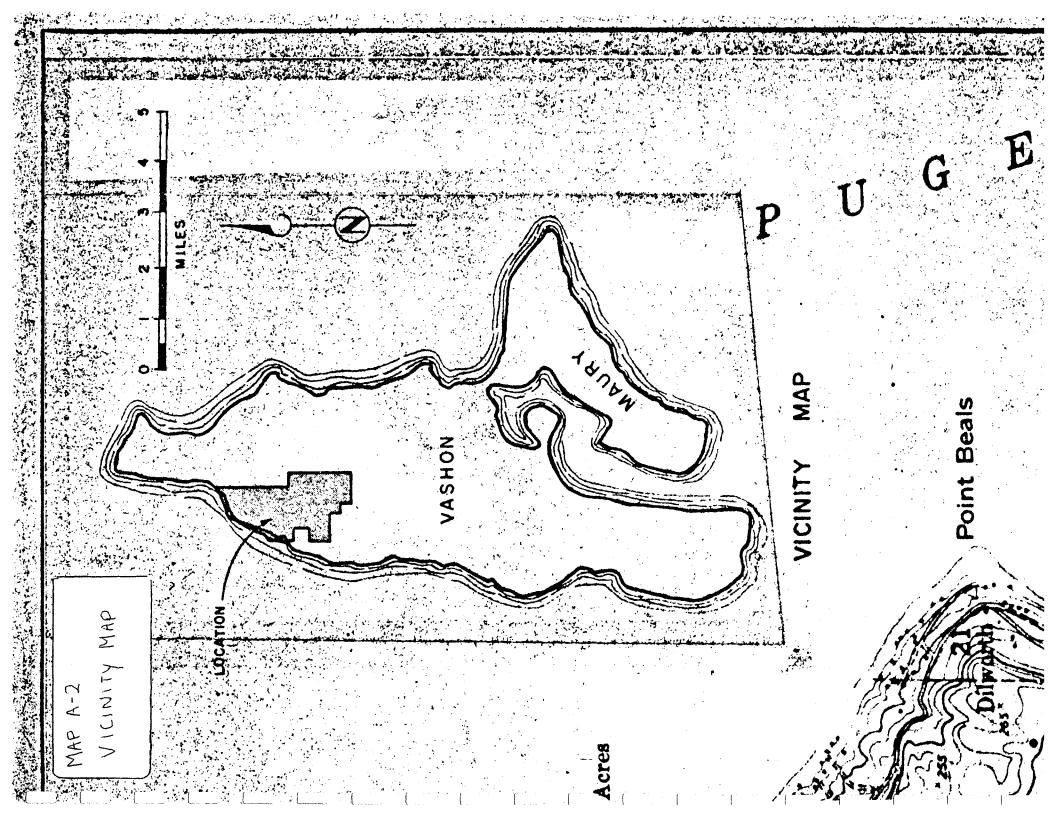
- R-105 See comments under Section B; "Population Projection"
- R-106 WWA supports the intention of this policy and stands ready to respond.
- F-301 WWA is not in an Urban Growth Area
- F-302 WWA has contracted with Island Water Management to provide a certified water system operator. There are no satellite management agreements in effect.

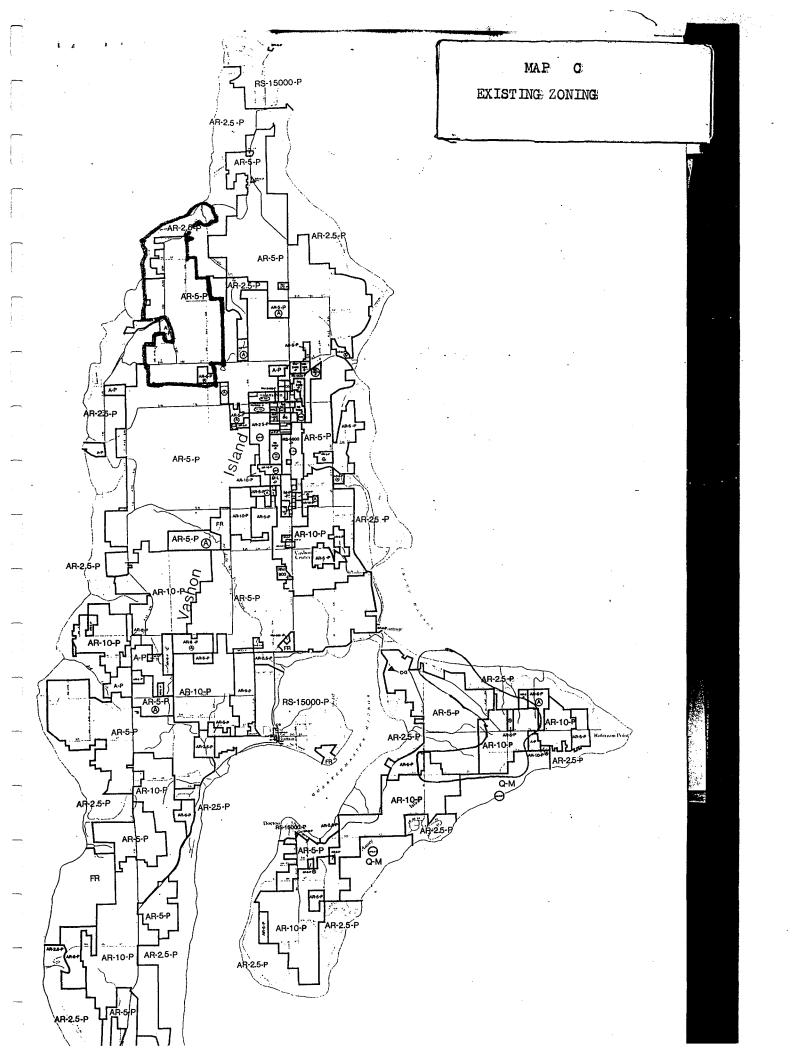
- F-306 WWA has an aggressive conservation program as mentioned earlier in this document.
- R-109 WWA is providing services to the Rural Area that protect basic public health and safety and the environment and are financially supportable at rural densities and do not encourage urban development.
- R-112 WWA's standards and plans for utility service are consistent with the long-term, low-density development intention of this policy.

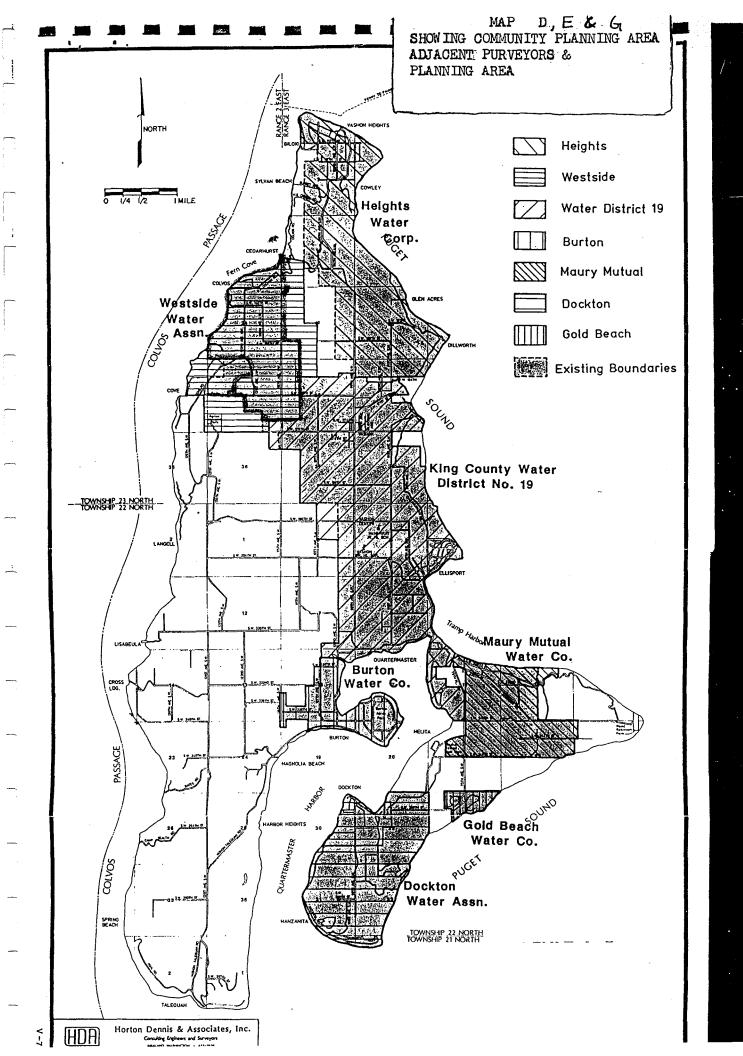
# Maps.

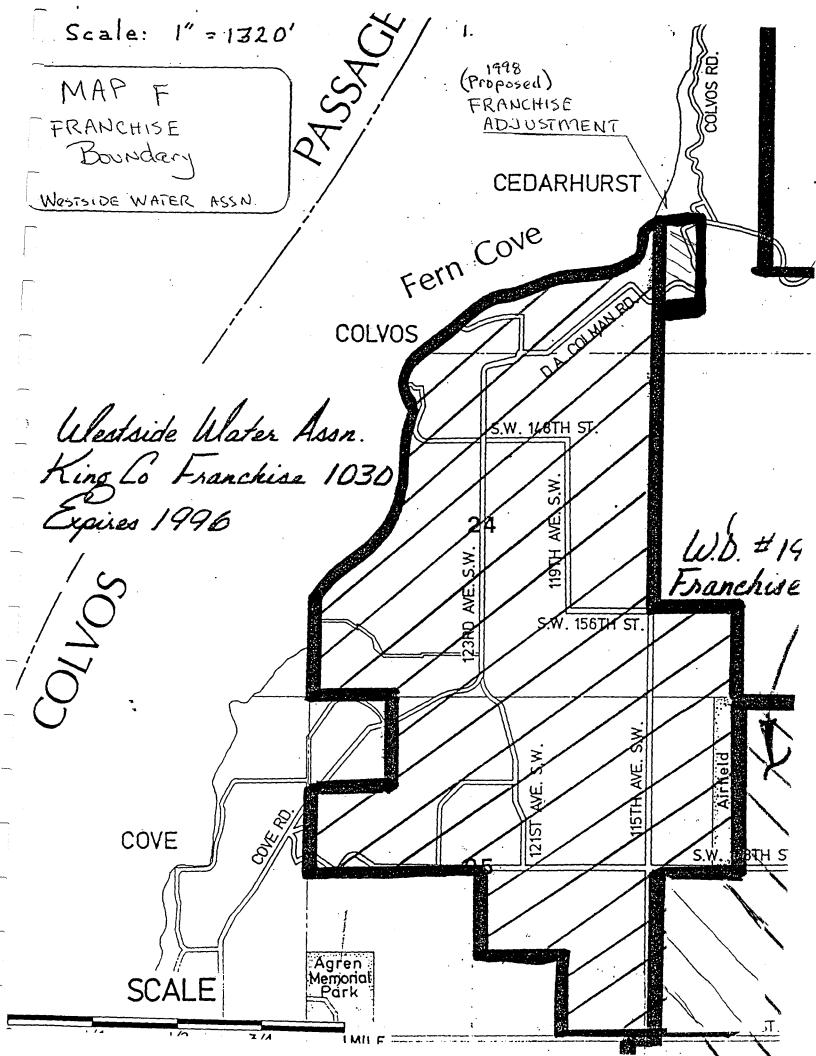
22

MAP. A - 1







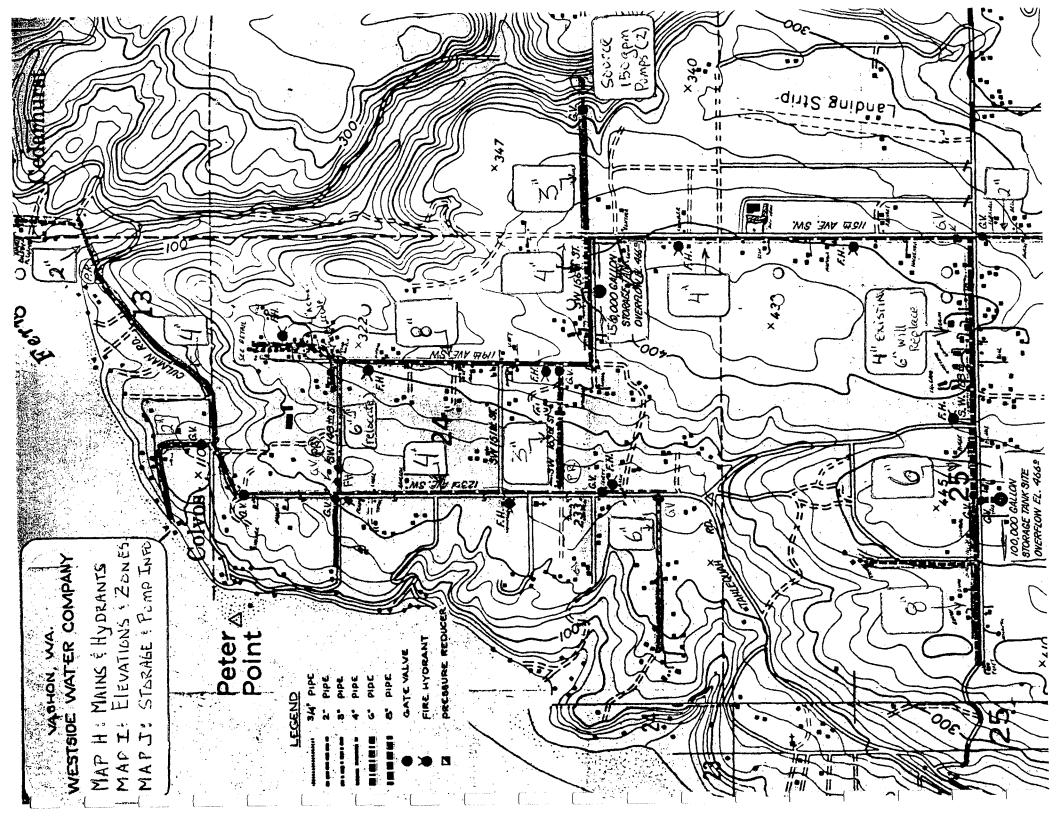


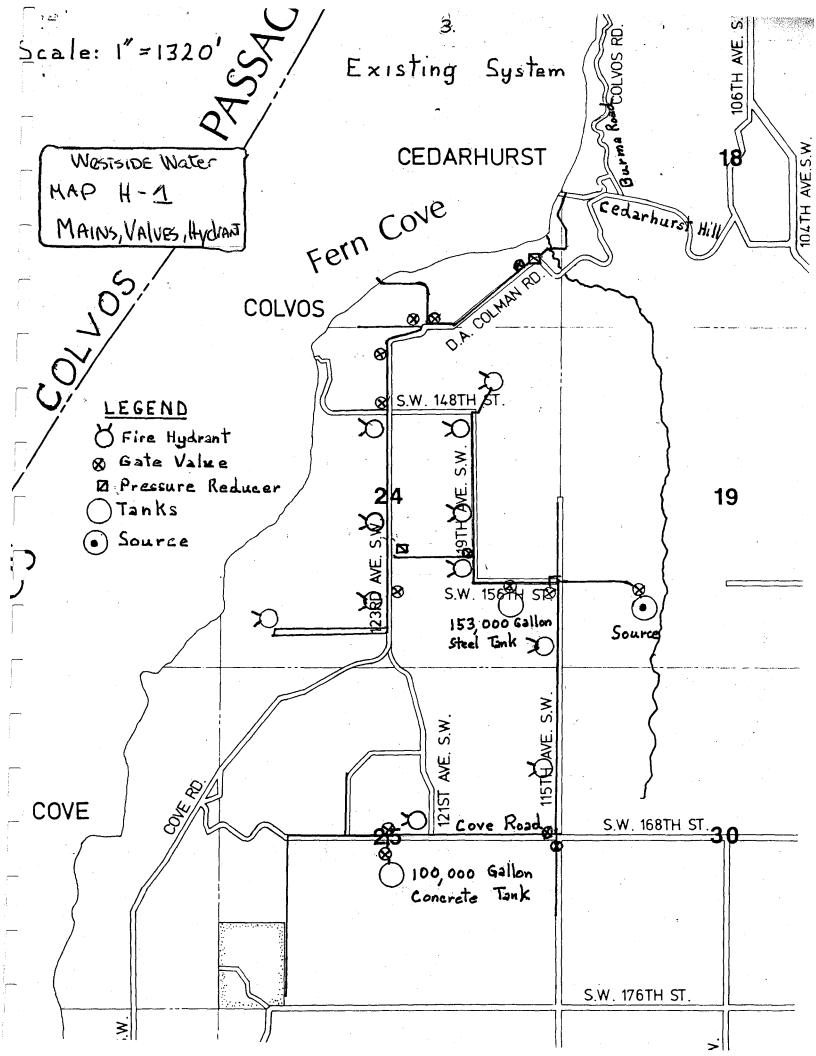
#### Westside Water Association

Explanatory note re: Franchise boundary adjustment; WWA 1998 Comprehensive Plan. REF: MAP F

This plan indicates an adjustment to the Franchise given to WWA at the northern end of the water service area, in the vicinity of SW McCormick Road. The reason for this adjustment is a desire to relocate the existing water main from its present location (cross country through the woods and across the Fern Cove Sanctuary which includes Shinglemill Creek - a salmon bearing stream- and a smaller significant stream) to the shoulder of the Cedarhurst Road SW.

This Franchise boundary adjustment does not indicate any expansion of the water service area of WWA.





# **Appendices**

#### Appendix A: Cross Connection Control Policy

It has always been the practice of Westside Water to prohibit and prevent cross connections. To this end WWA has adopted and will pursue the following cross-connection control program.

- 1. <u>Cross Connection Declared Unlawful.</u> Pursuant to WAC 248-54-490, the installation or maintenance of a cross- connection, unless protected by an approved backflow prevention device pursuant to WAC 248-54-285 is prohibited.
- 2. <u>Backflow Prevention Devices to be Installed.</u> Backflow prevention devices shall be installed at the service connection, and/or within any premises, and/or at any other location determined by the water purveyor when the nature and extent of activities on the premises or the material stored on the premises would present an immediate and dangerous hazard to health should a cross-connection occur, even though such cross-connection does not exist at the time the backflow prevention device is required to be installed. The determination of when and where the backflow prevention device or devices shall be required, shall be made by WWA upon it inspection of the premises. Said determination shall be made by WWA pursuant to WAC 248-54-85, and the American Water Works Association, Pacific Northwest Section's Second Edition of "Accepted Procedure and Practice in Cross-Connections Control". Backflow prevention devices required by this section shall be installed under the supervision and with the approval of WWA or its agents.

# STATE OF WASHINGTON DEPARTMENT OF CONSERVATION DIVISION OF WATER RESOURCES

Appendix B Water Right Documentation

# Permit to Appropriate Public Ground Waters of the State of Washington

Book No. 30 of Ground Water Per	mits, on page	u u	nder Applice	tion No.	
A Company of the State of the Company of the Compan	T SILE WATER	COMPANY	en en grande de la cale en des determina	ers in the weathers of the particular	annomitation are care of
	return. Marchia		Better Besterrert grown grown endeapour	q Libro queurqu <b>erabine</b> ir, pa	psycamic of aimprobest
s reby granted a permit to appropriate th	e following de	escribed pub	lic ground wi	iters of the	Sinte of
Washington, subject to existing rights, and to	the limitation	ns and provi	zions set out	herein.	
Priority date of this permit is	enney 14, 1	940	to page 10 page 10 page 14	Edwigolderja - 1181. urudusa Pangeta e -	e wasan gilandi aya paya ba
Source of the proposed ground water ap	propriation is	Les 11 bent	ion brooth.	maler wo	lla
<b>Mithin</b>	arce,	erendi o some oderazione di es	was niversal states and a second of second of second	No suntila meranakanya es	sub-area
zone. Na	me or number	of works is	e again an ann an agus an	aj i maj georgado sageo comance e s	ca, and his report for the state
Quantity of water appropriated shall be	limited to the	e amount wi	nich can be	beneficially	applied
and not to exceed gallons per	r misute;	1110	acre-	fect per ye	ar, to be
used for the following purposes:	Consumation of				
and the state of t			erkiya dhahassan iyon hakki izon i dabadhasida habad		
as more definitely set out below.					
Location of the well, tunnel, or infiltrati	ion tranch is	managaritenik	Ar 100 fee	and an	
south of nerthant owner of suc.19.					
en en en en lamitantem			ng in name base kananan giraka ya bisan wa	to de un unital description de transfell salarità	19 A 444 A 444 A 44 A 44 A 44 A 44 A 44
		Marian, in the second	ii iinti erik erik erik erik gert erik erik	نيد فرنهوم ، يو وجيدتين دي	- hati pridagani, izperinaditik
county of					
Une, or uses to which water is to be appli-					
For municipal supply:	gallons per	minute;	Anna de Caración d	ours-feet g	er year,
to supply				a jara saka kanda a saka	gfur mon trapping to all coding a
For irrigation:	gallons per	minute;	a way was a second	acre-feet ;	er year,
for the irrigation of acres.				* 1	:
For miscellaneous uses:	gallons per	minute; N		acre-feet p	er year.
for Committee describe excelle				e o contra d'acontra de	· · · · · · · · · · · · · · · · · · ·
LEGAL DESCRIPTION OF PROPI	ERTY ON WI	HICH WAT	ER IS TO B	E USED	
Area served by Nert Mile Veter	Generally, Ya	then Island	L films Com	Art. Walter	

#### DESCRIPTION OF WORKS FROM WHICH WATER IS TO BE WITHDRAWN

<u> </u>	The well will be tought friend		inches, and de	pth of leet.
\$66 6396	al linesi testege of 16	nditration trench: A merico O to 430 lineal fust, wi 12 will ourround the phy	11 by modified days	Porturated plans
		(fill a A	to an Indiam's	
_		(Ploase read carafulty provis		
	Particular specifications re	equired by the Supervisor of	Water Resources for t	he purpose of prevent-
ing	waste of public waters:		a .	
	wear.			
_			. *	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
-				
	Construction work shall be	egin on or before	Startos	
and	shall thereafter be prosect	uted with reasonable diliger	nce and completed on	or before
		į ča	ma 1. 1996	
- nnd	complete application of Wa	ater to proposed use shall be	e made on or before	and the second section of the sectio
	The state of the s		Jama 1, 1965	
- '. '	•		Car magnitude in Signature in the second	en e
				etropo de .
	Given under my hand and i	he seal of this office at Olymp	pia, Washington, this	day of
i .	<b>1607</b>	49.		
; **		**		A
			~	Arsouth.

State Superniant of Water Resources

#### Division of water resources

# Permit to Appropriate Public Waters of the State of Washington

Book No. 3/2 of Permits, on Page 13466 Under Application No. 18342

	:Co
of Vashen, Vashington	
is hereby granted a permit to appropriate the following ington, subject to existing rights and to the following struct and maintain at his own expense a weir, or other herein for irrigation purposes and such appropriation if ordered by the State Supervisor of Water Resources at all times with vire having a much opening neproit is isomed as a supplemental supply to States Permit No. 6238, the total annual diverse much withdrawn and diverted under the aforest	g limitations and provisions: Permittee shall con- r suitable device, for measuring any water granted shall be subject to a reasonable rotation system in Paveraian Intelie shall be tightly corec- not greater than 0.125 (1/0) inch. This surface Vater Cortificate No. 2743 and Grooten not to exceed 1120 acre-feet, 1230 am
Priority date of this permit is February 18, 19	03
Source of the proposed appropriation is Unital	ed springs and Roedlo Crock
ributary of Colves Passage	
The quantity of water appropriated shall be limit	ited to the amount which can be beneficially an-
be used for the following purposes: Community dealers as more definitely set out below.	
The approximate point of diversion is located	1. 250 feet east and 375 feet nouth from
The approximate point of diversion is located	•
the northwest corner of SEASE Sec. 19, and for	2. Mil Teal east and 325 feet could from
the northwest corner of SELSER Sec. 19, and for the northwest corner of SELSER of Sec. 19,	
the northwest corner of SELSME of Sec. 19,	
the northwest corner of SPSSA of Sec. 19, seing within SELSA Sec. 3	
the northwest corner of SPSSA of Sec. 19, seing within SELSA Sec. 3	
the northwest corner of SESE of Sec. 19, seeing within SESE SEC.  Sec. 3.  The use, or uses, to which water is to be applied:	9, Twp. 23N., Rge. 3 E. W. M.
the northwest corner of SESE of Sec. 19, seeing within SESE SEC.  Security of King  The use, or uses, to which water is to be applied:  For Domestic Supply and Miscellaneous Uses:	9 N., Rge 3 E. W. M.  2.0 cube feet per second during entir
the northwest corner of SELSEL of Sec. 19, being within SELSEL Sec. 3 county of King.  The use, or uses, to which water is to be applied: For Domestic Supply and Miscellandous Uses:  year for committy-demostic supply (see re-	9 , Twp. 23 N., Rge. 3 E. W. M.  2.0 cubic feet per second during entirevorse c.1de) to be use.
the northwest corner of SELSE of Sec. 19, being within SELSE Sec. 3	9 , Twp. 23 N., Rge. 3 E. W. M.  2.0 cubic feet per second during entire verse clde) to be used.  Twp. N., Rge. W. M.

Certificate	RECORD	No6		Page	No. 2743	
STATE OF WASHINGTO	n, Coun	TY OF	King			

### CERTIFICATE OF WATER RIGHT

oof to the satisfaction of the Sta e waters of an unnamed spr	te Supervisor of Hydraulics of Needle Creek		, has m	
	ing and	of Washington, of a	right to the use	
th maint on mainte of discussion				
th point or points of diversion w				
c. 19 , Twp. 23 N., Range	domestic supply	poses of		
der Appropriation Perm		G G		
at said right to the use of said wa d is hereby confirmed by the Sta	ters has been perfected in acc	ordance with the la	ws of Washingt	
lume6, at Page2743				
right hereby confirmed dates fro	om June 21, 1928	; that the	amount of water	
ich such right is entitled and he	reby confirmed, for the purpo	oses aforesaid, is lin	nited to an amor	
ually beneficially used for said p	surposes, and shall not exceed			
·	f a cubic foot per sec		•	
A description of the lands und			and the second	
l the place where such water is p				
			OR IRRIGATION	
PLACE OF USE	FGAL CURRINGIAN			
PLACE OF USE	LEGAL SUBDIVISION	No. Acres Described in Permit	No. Acres Actually Irrigated	
	LEGAL SUBDIVISION	No. Acres Described	No. Acres Actually	
	LEGAL SUBDIVISION	No. Acres Described	No. Acres Actually	
	LEGAL SUBDIVISION	No. Acres Described	No. Acres Actually	
	LEGAL SUBDIVISION	No. Acres Described	No. Acres Actually	
	LEGAL SUBDIVISION	No. Acres Described	No. Acres Actually	
	LEGAL SUBDIVISION	No. Acres Described	No. Acres Actually	
	LEGAL SUBDIVISION	No. Acres Described	No. Acres Actually	
		No. Acres Described in Permit	No. Acres Actually Irrigated	
ection Township Range	LEGAL SUBDIVISION  LEGAL SUBDIVISION	No. Acres Described in Permit	No. Acres Actually Irrigated	
LOCATION OF POWER PLANT		No. Acres Described in Permit  FOR F H. P. Described in	No. Acres Actually Irrigated  No. Acres Actually  No. Acres Actually  No. Acres Actually	
LOCATION OF POWER PLANT		No. Acres Described in Permit  FOR F H. P. Described in	No. Acres Actually Irrigated  No. Acres Actually  No. Acres Actually  No. Acres Actually	
LOCATION OF POWER PLANT ction Township Range		No. Acres Described in Permit  FOR F H. P. Described in Permit	No. Acres Actually Irrigated  No. Acres Actually Irrigated  H.P. Actually Developed	
LOCATION OF POWER PLANT		No. Acres Described in Permit  FOR F H. P. Described in	No. Acres Actually Irrigated  No. Acres Actually Irrigated  H.P. Actually Developed	
LOCATION OF POWER PLANT ction Township Range	LEGAL SUBDIVISION	No. Acres Described in Permit  FOR F H. P. Described in Permit	No. Acres Actually lirrigated  No. Acres Actually lirrigated  No. Acres Actually lirrigated  POWER  H.P. Actually Developed  ER USES	

#### CERTIFICATE OF WATER RIGHT

하게 하는 사람들이 되었다. 그는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은		4.		Nyana Nyana Nyana	inger Mananan ng	i i i i i i i i i i i i i i i i i i i	* * * · · · · · · · · · · · · · · · · ·	13
STORY WATER STREET STATES AND STATES AND STATES FOR THE PROPERTY STATES AND S			A Company				. and the	The same and
STRIPS WATER SIND AND AND AND AND AND AND AND AND AND A	· · · · · · · · · · · · · · · · · · ·	Andrew Commencer and the second						<b>₹</b> . <b></b>
STRIPS WATER STREET AND	***************************************	Property of a 74	electric de la companya del companya de la companya de la companya del companya de la companya d	A Commence of the Commence of				
WESTSTON WATER SERVENCE OF THE STATE OF THE STATE OF THE STATE OF		100		·	Security and the boundary of the control of the con		T MARKET COMME	
P. C. BOR 267  By proceed that the control of the process of the p			The state of	istantian i saar		man i majarahan ang managan an		and the second s
P. C. BOR 267  By proceed that the control of the process of the p		and the second second second second second	e anno merce de la compansa de la co			601. S <b>NC.</b> 1	CIER COMPANY.	WESTS LOW WATE
The print is the later to the control of the print is the print of the	an coce		waa tu saa da saa saa saa saa saa saa saa saa		(1)			Carlotte Contraction of the Cont
A graph of the case of the medical state of the former invested as the December of the design, and that see right as of said agrees as here retreated to grand and as the December of the design, and that see right invested by the December of the December of the design and as need invested by the December of the design and as need invested by the December of the Dec	99010	The state of the s	(10 Assultant of the state of	PARTICIPATION OF STATE OF THE PARTIES AND ADDRESS OF STREET				
PUBLIC SATES TO BE APPRISEDATED  The moved option of the Medic Codes  Colons Passage  The Model of the Medic State  1.0 1120  Comparity Despective Supplementations as a contract of section of the morthwest corner of SEASWE of Section 61 - 450 feet east and 315 feet south from the morthwest corner of SEASWE of Section 62 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 62 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 62 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest corner of SEASWE of Section 64 - 440 feet east and 325 feet south from the morthwest earlier 64 - 440 feet east and 325 feet east earlier 64 - 440 feet east earlier 64 - 440 feet east earlier 64 - 440 feet east earlier 64 - 4	predicall	and source and	ekine in te <b>rrit</b> ik. 1997 <b>- E</b> nneke <b>re</b> k	regulari de de la	al seguitoria de Premis consedi escardado casso	e est a hit ile en ente entire les l' e propositoit et mos	e ude of og oat moogs mad oants end tud been gen	f a magnet to the w wholes mostly pro- me of said masters
Colons Passage		-	para minor-samulação; Sr. 20m maiorigal das	-	Marie Con MacAntalana at Annagan (an Annagan Annagan		becommendation on the	erentral Distriction (Person
Enabled of the New York Needle Stock Colons of the New York of the Northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1979 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1970 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1970 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1970 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1970 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1970 - 440 feet east and 325 feet south from the northwest corner of SENSON OF Section 1970 - 440 feet east and 325 feet south from the northwest corner of SENSON			gi dir. Kapangan kabupatèn Tisang proping pelakati ng mbropili.	PPREPREPARE TO THE PERSON	an water to be	PLIES.	meriya inta 174 ayampiyaaninen t <b>arabiy<del>ata</del></b>	
Colons Passage    Colons Passage   Comparison   Colons	. New .					Meedia Creek	tions and News	
LOCATION OF DIVERSION WITH CHARACTER  ***Community Community Supply Constitutions are  **Community Community Supply Constitutions are  **Community Community Supply Constitutions are  **Location of Diversion with Character  **Location of Diversion				ann a' Meagail Tallatann Sinnann 1876 - Trainn Sinna Spondagery, gire	A channing give ; not the chart product differential pages of	and the state of t		
COMMUNITY Desertio Supple continuous sale  LOCATION OF DIVERSION WITHORAWAL  LOCATION OF DIVERSION WITHORAWAL  11 - 450 isst tast and 375 her south from the northwest corner of SEISN's of Section  22 - 440 feet east and 325 levt south from the northwest corner of SEISN's of Section  SEISN's SIA INTERIOR SECONDED PLATTED PROPERTY  RECORDED PLATTED PROPERTY	حجت الأنجيك	And a construction of the control of	4000	andrews of the same of the same		A market and the second		
LOCATION OF DIVERSION WITHCRAWAL  LOCATION OF DIVERSION WITHCRAWAL  1 - 450 feet east and 375 feet south from the northwest corner of SEISNE of Section  2 - 440 feet east and 325 feet south from the northwest corner of SEISNE of Section  SEISNE 19 23 BE Kinst  RECORDED PLATIED PROPERTY				."*	PART CHAIR STAN	dive a later	**************************************	
LOCATION OF DIVERSION WITHORAWAL  #1 - 450 isst east and 315 feet south from the northwest corner of SEANL of Section  #2 - 440 feet east and 325 feet south from the northwest corner of SEANL of Section  #50 and the section of SEANL of Section  #50 and the section of SEANL country  #50 and the sec	**************************************		rafter in the source of the space to the space of the source of the source of the space of the source of the sourc	realised on the complementaries of the comple	rein eine Britain der			
#1 - 450 isst east and 325 feet south from the porthwest corner of SEASWE of Section #2 - 440 feet east and 325 feet south from the northwest corner of SEASWE of Section  ***********************************				فأد سندنيونيون سيب	indus 51e	upi outie	COMPANY TO THEF	Comparate Down
#1 - 450 isst east and 315 feet south from the porthwest corner of SEASWE of Section #2 - 440 feet east and 325 feet south from the northwest corner of SEASWE of Section #40 alone are instance and account section. The northwest corner of SEASWE of Section #40 alone are instance and account section.								
#1 - 450 isst east and 315 feet south from the porthwest corner of SEASWE of Section #2 - 440 feet east and 325 feet south from the northwest corner of SEASWE of Section #40 alone are instance and account section. The northwest corner of SEASWE of Section #40 alone are instance and account section.		Ay anapatatan may to have may arrange massers assert massers	and the imperialization of a second on the se			e er gette midtensadis com etgs menneg eggeng	an an angan ang <b>an</b> agan an an <del>dan anada</del>	and the state of t
#1 - 450 isst east and 325 feet south from the porthwest corner of SEASWE of Section #2 - 440 feet east and 325 feet south from the northwest corner of SEASWE of Section  ***********************************		Annual Section of the						
#1 - 450 isst east and 325 feet south from the porthwest corner of SEASWE of Section #2 - 440 feet east and 325 feet south from the northwest corner of SEASWE of Section  ***********************************					A Maria			
#1 - 450 feet east and 775 feet south from the porthwest corner of SEASME of Section #2 - 440 feet east and 225 feet south from the northwest corner of SEASME of Section #42 - 440 feet east and 225 feet south from the northwest corner of SEASME of Section #45 ************************************		nd distribution to the state of the state of the	<del>li</del> .	ON WITHORAK	CATION OF DIVE	LOCA	**************************************	
#2 - 640 feet east and 325 feet south from the northwest corner of \$255% of Section of Section of the northwest corner of \$255% of Section of S				in the state of the second	matter and the state of the sta		· · · · · · · · · · · · · · · · · · ·	PROCESS AND ASSESSMENT
SENSON SER CONTRACTOR OF A CON	toe 19	Etsut of Sec	irner of SE	porthvest c	outh from the	nd 315 Inst so	er east and 3	11 - 450 feet
SENSON SER CONTRACTOR OF A CON	tion 19	SV best of so	corner of S	northwest	south from 1	nd 325 test ka	et emst and T	42 - 640 feet
SE SUE 15 2 NE NAME  RECORDED PLATTED PROPERTY			37-7			The state of the s	aterior de transferencia de la regiona d	S. Maria de la companya della companya della companya de la companya de la companya della compan
SE SUE 15 3 3E NAME AND AND AND PROPERTY			entermontor baimo o remo anticidades	with the substitution of the Branch of the State of the S	· ····································			
RECORDED PLATTED PROPERTY	was	1	1	Maria Andreas		50 <b>年2-7</b> 時代かり	※ 注意整理技术的無证 5 少概念。	
	28	A	*	EU PROPERTY	RECORDED PLA		· · · · · · · · · · · · · · · · · · ·	
LEGAL DESCRIPTION OF PROPERTY NATER TO BE USED ON			and a secondary of the secondary	make from the court of the comment of the	TYPE	ছ সংক্রা গ্রাক <i>না</i> ক্ষাক্র	F SPAR NAME OF	*
THE PARTY OF THE P			8 FC\$ 5\ 7 M4	TV WATER TO M	RIPTION OF DROY	LEGAL DESCRE	· ·	
그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 가는 하는 것 같아. 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 가 되었다. 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그			A STORY FLAT	E- STREET, THE TH		The same of the sa		
		of the second						

or water company within bed. (4, f. 11 N., R. 1 and 1 g. w. R.

M

7....



King County Water and Land Resources Division

Department of Natural Resources 700 Fifth Avenue, Suite 2200 Seattle, WA 98104 (206) 296-6519 (206) 296-0192 FAX

March 12, 1998

Doug Dolstad Island Water Management PO Box 13333 Burton, WA 98013

Dear Mr. Dolstad:

Thank you for attending the Utilities Technical Review Committee (UTRC) meeting yesterday. The UTRC conditionally approved the Westside Water Association water comprehensive plan. I will forward the plan to the Executive for his transmittal to the King County Council when I receive your response to the following three issues identified by the UTRC as conditions of approval.

- 1. Please discuss the recent developments concerning the filtration plant for the Shinglemill Creek source. The UTRC understands that the 3M company, which produces the filters for the filtration plant, may be intending to buy back all filtration equipment, presumably as part of a larger national effort to reduce liability. How will this affect the Association's use of this surface water source as a supply for peak day water? When will the filtration equipment be returned? What alternative treatment technology will the Association pursue in order to continue to supply high quality water?
- 2. Describe the Association's current efforts to obtain additional water sources and the use of such sources if obtained (i.e., would the Shinglemill Creek source continue to be used).
- 3. Address the Association's position regarding satellite system management. The UTRC understands that the Association's current water sources preclude significant expansion and that residents do not wish for much future growth. In the future, however, there may be situations that arise adjacent to or within the Association's service area that may best be solved through satellite management. Would the Association be opposed to serving an additional connection if there were no significant net impacts to the Association's water supply and fund balance?

Please send your responses to these questions to my attention. If you need any further clarification or wish to discuss these issues in greater detail, please call me at (206) 296-1952.

Sincerely,

Bruce Bennett, Chair

King County Utilities Technical Review Committee

#### **Island Water Management**

PO Box 13333; Burton, WA 98013 (206) 995-8414 (206) 567-4568 FAX

03/31/98

Bruce Bennett
Chair, Utilities Technical Review Committee
King County Water and Land Resources Division
Department of Natural Resources
700 Fifth Avenue, Suite 2200
Seattle, WA 98104

RE: Westside Water Comprehensive Plan, Supplemental Information

Dear Bruce,

This letter is a response to your request for supplemental information regarding three issues of interest to the Utilities Technical Review Committee. I want to thank you and the Committee members for your time in meeting with me and helping Westside Water toward approval of its Comprehensive Plan.

#### Item 1: Filtration Plant, 3M situation, alternatives.

There is an error of communication regarding the 3M situation which is necessary to correct. 3M is only planning to buy back their cartridge filtration equipment - which is the second stage filter in the WWA system. The first stage, a bag filter, will continued to be manufactured by 3M. It is the bag filter that is the real workhorse in the filtration package. In response to this situation the vendor who supplied Westside's filtration equipment, Filtration Technologies of Boise, Idaho, has petitioned the State of Washington to approve another manufacturer's cartridge filter and is presently conducting trial tests at several sites in Washington. Mr. Bob James, Northwest Regional Engineer for the State Department of Health and I have had several discussions about the status of these tests which as of this date have not been concluded. Results and subsequent approvals are anticipated during the month of April. Greg Fisher of Filtration Technologies is planning to send replacement second stage filters i.e. the cartridge filters, out in early May of this year. Fortunately, WWA has enough 3M cartridge filters reserves to see it through the 1998 summer season should there be a problem with the substitute filter approval. Therefore, the supply of high quality water to WWA's customers via its filtration plant seems assured through at least 1998. Beyond 1998, WWA is considering several options for a supplemental water supply. These include: acquiring an existing private well; pursuing an existing approved in-line filtration plant e.g. Rosedale; and, drilling a well.

#### Item 2: Efforts to obtain additional water sources and effect on surface water source.

Only one of the two private wells initially under consideration is still available. One well owner decided they didn't want to sell or covenant their well to WWA. The second well is still an option and negotiations are continuing. The logistics of contacting all the members of the family who have an interest in that well are proving daunting and there is a dispute over a common road with the other well owner which is now in court. An easement would have to be obtained from whoever ends up with legal ownership of the road (a private driveway) if the well were to be acquired by WWA. Also under review is the idea of drilling a well in the vicinity of the two existing private wells. It is known that WWA could only withdraw as much water as would not negatively impact the flow of the other wells. It is hoped such a drilled well would produce a minimum of 30 gpm. Preliminary negotiations with a land owner in the vicinity have been established and the idea is

moving forward. Should either of these well options be successful, an exchange of water rights would be made with the Department of Ecology. A portion of WWA's surface water right would be exchanged for a ground water right in the amount of the gpm available from the well. WWA would retain a reduced surface water right from Shinglemill Creek and its unnamed tributaries and would continue to use these sources on an emergency basis as needed. Given the historical usage pattern of the system it is anticipated this source would be used very little if the well produces at least 30 gpm.

#### Item 3: Satellite system management

The UTRC has specifically asked, "Would the Association be opposed to serving an additional connection if there were no significant net impacts to the Association's water supply and fund balance?" WWA has neither embraced nor refused to entertain the concept of satellite system management. The situation has not yet arisen which would occasion consideration. If however such a situation were to present itself, it would be decided on the merits of the situation at the time and the capability of WWA to provide consistent and reliable satellite system management while concomitantly sustaining no net impacts to the Association's water supply and fund balance.

I hope this clarifies the issues you have brought forth and you are able to forward to the County Executive the Westside Water Association's 1998 Comprehensive Plan for his transmittal to the King County Council. If you have any questions please call me at (206) 567-4568

Douglas P. Dolstad

Island Water Management

Manager, Westside Water Association