D.1 INTRODUCTION

This appendix presents a compilation of water right information for Water Resource Inventory Area (WRIA) 19 (the Lyre-Hoko Watershed), including Department of Ecology records for water right certificates, permits, applications and claims. This information was obtained from Ecology’s electronic database, the Water Rights Application Tracking System (WRATS). Duplicate and anomalous information were checked. Paper water rights will be acquired and reviewed for any anomalous entries.

Federal reserved water rights in WRIA 19, including tribal rights, are also listed, as these could be a significant portion of allocated water. No quantification was available for these rights.
Water right information is presented for each subbasin, and compared to stream flow and actual water use information to assess the significance of existing water rights in the overall water budget of each subbasin.

This section also presents estimates of current water use and future demand. Current and future water use were estimated based on Clallam County geographic information system (GIS) data, 2000 census data, U.S. Geological Survey (USGS) water use estimates, local knowledge about agricultural water use, and meter records where available. The estimates will be adjusted based on additional information to be developed with the in-stream flow work being conducted by the Washington Departments of Ecology and Fish and Wildlife. This work, conducted through the Watershed Planning Act supplemental funding, will address in-stream water needs throughout the year.

D.2 SUBBASIN SUMMARIES

| TABLE D-1.  
| WRIA 19 SUBBASINS |
|-------------------|------------------|
| Subbasin Name     | Area (square miles) |
| Salt Creek        | 44.6             |
| Lyre River        | 18.0             |
| Lake Crescent     | 49.5             |
| Twin Rivers       | 33.4             |
| Deep Creek        | 18.2             |
| Pysht River       | 54.4             |
| Clallam River     | 35.8             |
| Hoko River        | 70.9             |
| Sekiu River       | 44.5             |
| Neah Bay          | 14.7             |
| **Total**         | **384.1**        |

WRIA 19 has a total area of 384 square miles, and extends eastward from the Makah Reservation’s eastern boundary, to the Salt Creek Subbasin just west of Port Angeles. The WRIA consists of 9 subbasins, as listed in Table D-1. This section presents water rights information for the all but the Neah Bay Subbasin, which is not being evaluated for the watershed plan because it is almost entirely on the Makah Indian Reservation.

Total population and housing estimates for each subbasin were based on census block population densities derived from 2000 Census data, and total area in the subbasin. The total population includes populations in group quarters (e.g., prisons, military), and the total housing unit estimate includes occupied and vacant units. The average occupancy rate for Census Tracts 9801, 9802 and 9803, which includes all of WRIA 19 and parts of WRIAs 20 and 18, was about 70 percent. By comparison, the average occupancy rate for Clallam County in 2000 was about 89 percent (2000 U.S. Census).

D.2.1 Salt Creek Subbasin

Figure D-1 shows the boundaries of the Salt Creek Subbasin, which has an estimated population of 2,319 and an estimated 1,038 housing units, making it the WRIA 19 subbasin with the largest population.

There are no identified federal reservations in the Salt Creek Subbasin. However, the Lower Elwha Indian Reservation is immediately to the east, along the Elwha River. No population or housing data is available at this time for the Lower Elwha Indian Reservation.

There are 255 water rights documents for the Salt Creek Subbasin, with an estimated total instantaneous withdrawal rate of 7.3 cfs. All of the 10 largest water rights are certificates. Nine of the 10 are privately owned; one is owned by the Clallam School District 313, for domestic-multiple use (0.10 cfs, from an unnamed creek). The 10 largest rights are mostly from surface water sources, totaling 2.12 cfs. One certificate is for 0.11 cfs from a well source.

The largest right is for power and domestic-single purposes, diverting 0.6 cfs from Uncle Bill Creek. If the power use is for hydroelectricity, the power generation portion of the flow would be non-consumptive, that is, flow is expected to return to the source stream. The second largest right is for
fish propagation (0.5 cfs, from Salt Creek). Fish propagation uses also tend to be non-consumptive, with flow expected to return to the source stream.

There are four large irrigation-related rights totaling 0.57 cfs, with 0.35 cfs from Salt Creek, 0.12 cfs from an unnamed spring, and 0.1 cfs from Coville Creek. One of the irrigation rights on Salt Creek also includes a domestic-single purpose.

There are four large rights for domestic-multiple purposes totaling 0.56 cfs. Three of these are from unnamed streams, totaling 0.45 cfs. One is from a well source, for 0.11 cfs.

D.2.2 Lyre and Lake Crescent Subbasins

Figures D-2 and D-2a show the boundaries of the Lyre and Lake Crescent Subbasins. The Lyre River Subbasin has an estimated population of 184 and an estimated 92 housing units. The Lake Crescent subbasin has an estimated population of 65 and an estimated 150 housing units. There are no identified federal reservations in the Lyre or Lake Crescent Subbasins. However, the Lake Crescent subbasin is almost entirely included in the Olympic National Park, with small portions owned by private landowners.

There are 24 water rights documents for the Lyre River Subbasin, with an estimated total instantaneous withdrawal rate of 5.5 cfs. There are 128 water rights documents for the Lake Crescent Subbasin, with an estimated total instantaneous withdrawal rate of 4.2 cfs.

Of the 10 largest water rights, four are certificates and six are claims. The largest certificate is for domestic-multiple purpose, owned by the Crescent Water Association (5.01 cfs), from a well. Two large certificates, both privately owned, are for fish propagation and domestic-single purpose (total 0.11 cfs), and for domestic-single purpose (0.02 cfs). One certificate is for wildlife and fish propagation purposes (0.2 cfs), from an unnamed stream. The fish and wildlife propagation uses are considered to be non-consumptive, that is, flow is expected to return to the source stream. The six largest claims are privately owned and are all for domestic-general purposes, three from wells, and the others from unnamed sources (estimated total 0.12 cfs).

Of the 10 largest water rights for the Lake Crescent Subbasin, nine are certificates and one is a permit. All but one of the purposes are domestic, and two are for irrigation and power as well as domestic use. One right is solely for power generation. The 10 largest rights appear to be all privately owned.

The largest certificate in the Lake Crescent Subbasin is for power and domestic-single purposes, for 1.0 cfs, and is privately owned. The source is La Poel Creek. The second largest water right is for 0.33 cfs for power generation, from Ovington Creek. If hydroelectricity is being generated in these cases, then the power uses would be considered non-consumptive uses of water. Ovington Creek has two other large domestic-single uses, one of which is also for irrigation, totaling 0.1 cfs. The third largest right is for irrigation and domestic-single purposes, from Barnes Creek, for 0.2 cfs. The fourth and fifth largest rights are for domestic-multiple purposes, one from Hyde Creek for 0.15 cfs, and one from an unnamed stream for 0.10 cfs. There are two other large domestic-single rights, one for 0.08 cfs from Lake Crescent, and another for 0.05 cfs, from Cedar Point Creek.

D.2.3 Twin Rivers Subbasin

Figure D-3 shows the boundaries of the E/W Twin Rivers Subbasin, which has an estimated population of 29 and an estimated 15 housing units. There are no identified federal reservations in the Twin Rivers Subbasin.

The Twin Rivers Subbasin shows an estimated total instantaneous withdrawal rate of 0.16 cfs. Most of the water rights documents are claims for domestic-general purposes (estimated total of 0.12 cfs), including one claim with domestic-general and stock watering, with springs, one well, and unnamed sources. There are two certificates for domestic-single and domestic-multiple purposes, from
unnamed spring sources. There is one new application for domestic-single purposes, for 0.02 cfs from the East Twin River.

**D.2.4 Deep Creek Subbasin**

The Deep Creek Subbasin has an estimated population of 1 and an estimated one housing unit. There are no identified federal reservations in the Deep Creek Subbasin.

There are two water rights documents for the Deep Creek Subbasin, both owned by Jessie Gibson. One is a certificate for a domestic-single purpose for 0.02 cfs from an unnamed spring. The other is a claim for stock and domestic-general purposes, with an estimated 0.02 cfs of instantaneous flow, from an unnamed source.

**D.2.5 Pysht River Subbasin**

Figure D-4 shows the boundaries of the Pysht River Subbasin, which has an estimated population of 48 and an estimated 69 housing units. There are no identified federal reservations in the Pysht River Subbasin.

There are 15 water rights documents for the Pysht River Subbasin, with an estimated total instantaneous withdrawal rate of 0.4 cfs.

Of the 10 largest water rights documents for the Pysht River Subbasin, five are certificates and five are claims. Four certificates are for domestic-multiple purposes (total 0.11 cfs), owned by Merrill & Ring, Inc., and one is for irrigation and domestic-single purposes (0.06 cfs), owned by Shirley Brown.

The five large claims are all for domestic-general purposes. Three are owned by individuals, one by Merrill & Ring, Inc., and one by the Washington Department of Game. The total estimated instantaneous flow for the five claims is 0.1 cfs.

The certificates divert water from Jim Creek (0.06 cfs), the Pysht River (total 0.09 cfs), Indian Creek (0.05 cfs), and Butler Creek (0.02 cfs). Two of the claims list unnamed springs for their sources, and the other claims have unnamed sources.

**D.2.6 Clallam River Subbasin**

Figure D-5 shows the boundaries of the Clallam River Subbasin, which has an estimated population of 1,567, including approximately 900 inmates at the Clallam Bay Correctional Facility, and an estimated 493 housing units. There are no identified federal reservations in the Clallam River Subbasin.

There are 35 water rights documents for the Clallam River Subbasin, with an estimated total instantaneous withdrawal rate of 2.5 cfs.

Of the 10 largest water rights documents for the Clallam River Subbasin, four are certificates, two are permits, and four are claims. Three certificates are for domestic-multiple (total 1.25 cfs) and one is for municipal (0.62 cfs). The Clallam County PUD No. 1 and Clallam Bay Water Association own the two largest certificates (1.0 and 0.62 cfs, respectively). One permit is for domestic-multiple (0.22 cfs) and another for mining and commercial (0.1 cfs). There are four claims for domestic-general purposes (estimated total 0.08 cfs). All the certificates are for diversions from unnamed streams, the remainder of the named sources include wells and the Clallam River.

**D.2.7 Hoko River Subbasin**

Figure D-6 shows the boundaries of the Hoko River Subbasin, which has an estimated population of 215 and an estimated 128 housing units. There are no identified federal reservations in the Hoko River Subbasin.
There are 23 water rights documents for the Hoko River Subbasin, with an estimated total instantaneous withdrawal rate of 6.9 cfs.

Seven of the 10 largest water rights are certificates: two for fish propagation (total 5.22 cfs); three for domestic-multiple (total 1.29 cfs); and two are for domestic-single (total 0.04 cfs). The two large fish propagation certificates are owned by ITT Rayonier and the Makah Council, and withdraw water from an unnamed creek and Brownes Creek. As fish propagation uses, the flows tend to be non-consumptive, that is, flow is expected to return to the source stream. The three large domestic-multiple certificates are for well sources, and are owned by Clallam PUD No. 1 and the former Crown Zellerbach Corp. The two large domestic-single certificates are owned by individuals, and have an unnamed spring and an unnamed creek as their sources.

Three claims make up the rest of the 10 largest water rights, with an estimated total of 0.06 cfs. Listed sources for two of the three large claims include a well and an unnamed stream.

D.2.8 Sekiu River Subbasin

Figure D-7 shows the boundaries of the Sekiu River Subbasin, which has an estimated population of 113 and an estimated 116 housing units.

There are no identified federal reservations in the Sekiu River Subbasin.

There are 20 water rights documents for the Sekiu River Subbasin listed in the Department of Ecology water rights database, with a total estimated instantaneous withdrawal rate of 0.7 cfs.

Of the 10 largest water rights in the Sekiu Subbasin, six are water right certificates, all for domestic-multiple purposes, and four are claims, all for domestic-general purposes. Three of the certificates are for diversions from Olsen Creek, by Clallam County PUD No. 1 (0.2 cfs), J. Hoeppner (0.1 cfs), and Crown Zellerbach Corp. (0.3 cfs). One certificate for 0.07 cfs is for an unnamed stream, and another certificate, for 0.03 cfs, is for Bullman Creek. One water right held by Crown Zellerbach is for 10 gpm from a well.

The sources for two of the claims include the Sekiu River and an unnamed stream. No source is listed for the other two claims.
Figure D-2
Figure D-2a
Figure D-3
Pysh River Sub-basin

Water Use Analysis

Maximum Units Based On Zoning
- 1 - 6
- 7 - 28
- 29 - 77
- 78 - 170
- 171 - 417

Pysh River Sub-basin Water Use

[Map showing water use analysis with legend and units]
Figure D-5
Figure D-7