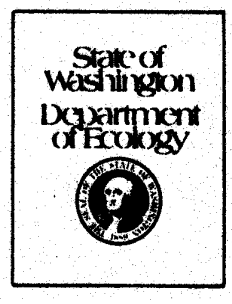


STATE WATER PROGRAM

W.W.I.R.P.P. SERIES-NO. 5

INSTREAM RESOURCES PROTECTION PROGRAM

KITSAP WATER RESOURCE INVENTORY AREA (WRIA) 15

Including

PROPOSED ADMINISTRATIVE RULES

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
JUNE 1981

INSTREAM RESOURCES PROTECTION PROGRAM
KITSAP WATER RESOURCE INVENTORY AREA (WRIA) 15
including
PROPOSED ADMINISTRATIVE RULES

Prepared by
Water Resources Policy Development Section
Washington State Department of Ecology

Project Planner, Jeanne Holloman
(206) 753-6189

Washington State Department of Printing
Olympia, Washington

June 1981

TABLE OF CONTENTS

Page

LIST OF FIGURES AND PLATES

LIST OF TABLES

APPENDICES

INTRODUCTION

WESTERN WASHINGTON INSTREAM RESOURCES PROTECTION PROGRAM

The Western Washington Instream Resources Protection Program (WWIRPP) was initiated by the Washington Department of Ecology (WDOE) in September 1978. The program was designed to develop and adopt instream resource protection measures for Water Resource Inventory Areas (WRIA) in Western Washington as authorized in the Water Resources Act of 1971 (90.54 RCW), Minimum Water Flows and Levels Act (90.22 RCW), and in accordance with the Water Resources Management Program (173-500 WAC).

Prior to 1969 statutory authority relating to the protection of instream flows was provided by the State Fisheries Code (Chapter 75.20 RCW). Provisions were made under the Fisheries code for the supervisor of hydraulics (WDOE) to refuse issuance of any permit to divert water from a stream if, in the opinion of either director of Fisheries or Game, the permit might result in lowering streamflow below that necessary to adequately support food and game fish populations. At the start of the Western Washington Instream Resources Protection Program, there were approximately 250 streams in the state with low flow limitations and 250 closed to additional appropriations under the provisions of Chapter 75.20 RCW.

The Western Washington Instream Resources Protection Program evaluates the surface water source limitations previously established administratively by the Department of Ecology under the State Fisheries Code process, and sets forth additional streams and lakes to be closed to future consumptive appropriations. The program will further establish instream flows for streams that still have water available for consumptive appropriation.

THE INSTREAM RESOURCES PROTECTION PROGRAM DOES NOT AFFECT EXISTING WATER RIGHTS.

KITSAP INSTREAM RESOURCES PROTECTION PROGRAM

The administrative rules proposed for the Kitsap Instream Resources Protection Program represent the first phase in the development of the state's Water Resource Management Program for that Water Resource Inventory Area (WRIA) 15. Establishment of instream flows and closure of certain streams during low flow, high stress periods will help to provide sufficient water for food and game fish, wildlife food supply and habitat, recreation, water quality, and protection of other environmental and aesthetic values.

Environmental Impact Statement

Environmental impact statement requirements have been met in the overall Western Washington Instream Resources Protection Program Final Environmental Impact Statement (distributed June 1979). A basin specific supplemental environmental impact statement, therefore, is not required.

Public Involvement

The Department of Ecology (WDOE) conducted meetings in January 1980 to inform the major water users and other interested parties in Water Resource Inventory Area 15 of the Kitsap Instream Resources Protection Program. These included the Suquamish Indian Tribe, the Point No Point Treaty Council representing the Skokomish Tribe, and the Port Gamble and lower Elwha Klallam Tribes, small domestic water suppliers, water districts, municipal and industrial water suppliers, U.S. Navy water supply representatives from the Bangor, Keyport, and Bremerton facilities, and the state departments of Fisheries and Game. During the seven months from January to August 1980, the department held six instream flow workshops and two meetings to determine legal criteria for the program.

A draft program document was distributed for public review in December 1980. On January 7 and 8, 1981 public hearings were held in Belfair (Mason County), Bremerton (Kitsap County), Vashon (King County), and Gig Harbor (Pierce County) to receive public testimony in the Kitsap Instream Resources Protection Program.

Because of the significant number and substance of the oral comments and written statements received at the public hearings and during the two months review period, the adoption proceeding originally scheduled for April 8, was continued to June 8, 1981. The department later found that in order to fully consider the views of the public, .a second continuance would be necessary.

The newly scheduled adoption proceeding will be held at 2:00 p.m., July 10, 1981 at the Department of Ecology hearings room located in Rowesix Building No. 4, 4224 Sixth Avenue S.E., Lacey, Washington.

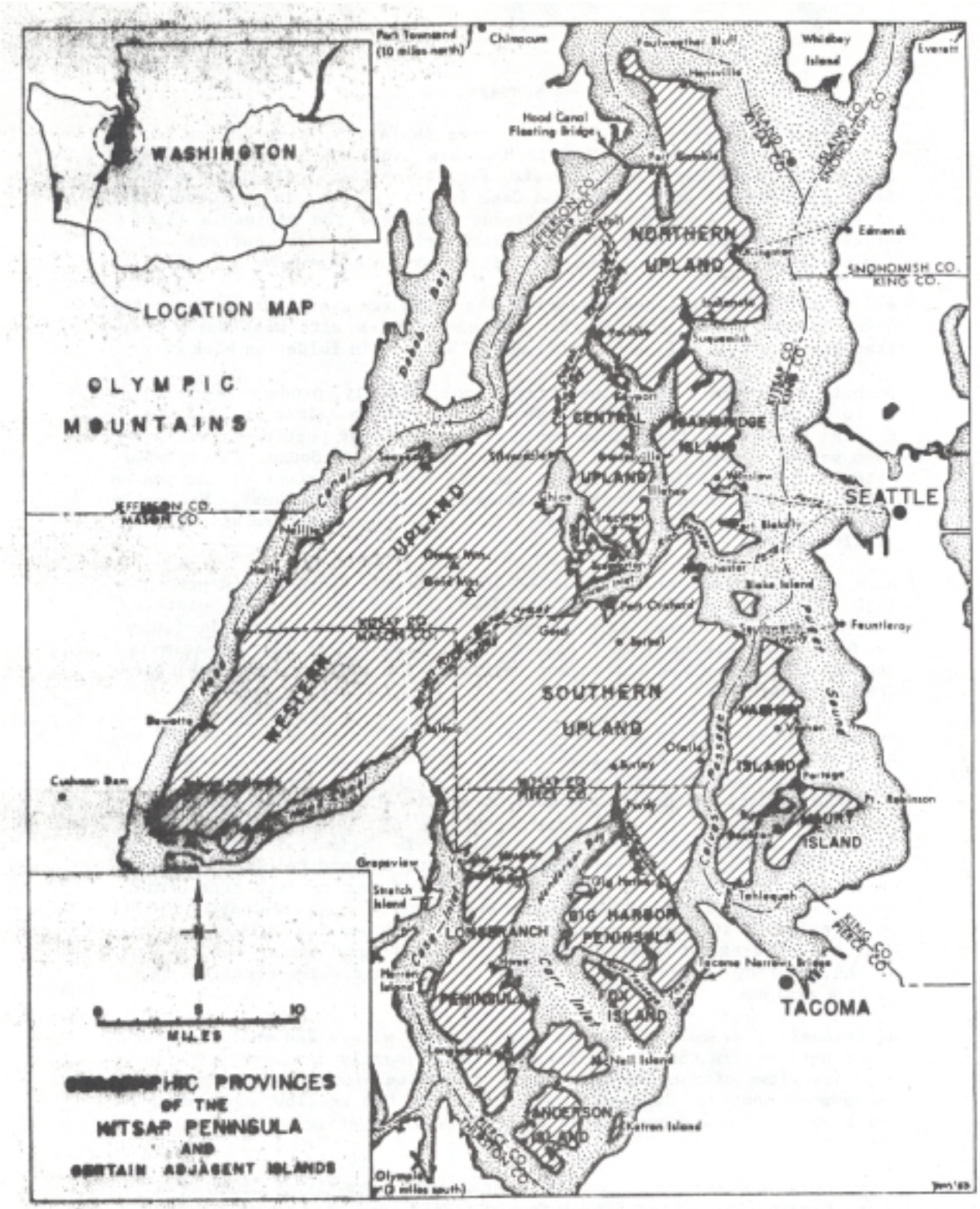


FIGURE 1. Location map of the Kitsap Water Resource Inventory Area (WRIA) 15, indicating geographic provinces. Use in correlation with Plate 1. (Map modified from Garling-Molenaar, 1965).

SUMMARY

The Kitsap Water Resource Inventory Area (WRIA) 15, lies in the Puget Sound Trough between the Olympic Mountain Range on the west and the Cascade Mountain Range on the east. Except for the 4-mile land connection lying between Hood Canal and Case Inlet, the area is surrounded by marine waters. Recharge to the ground waters of the peninsula is by precipitation and seepage of water from surface systems. Surface waters are sustained by precipitation and inflow from ground waters.

All of the 582 identified streams in the basin are small. Only 12 streams have drainage areas greater than 10 square miles with most being less than 1 square mile. (See detailed map of WRIA 15 in folder on back cover.)

Despite their small size, the streams, collectively, produce an estimated 65 to 70 percent of the natural production of coho salmon in Hood Canal. Several streams in the Kitsap Basin produce a major portion of early run chum salmon, a stock that is totally unique in Puget Sound. Two streams, Stimson and Little Mission creeks provide about 25 percent of the searun cutthroat trout production in the southern arm of Hood Canal. Virtually all streams of the Kitsap Peninsula that support salmon are utilized by steelhead trout.

Rare or endangered wildlife species in the Kitsap Basin that depend upon fish production in the streams for food include bald eagles, ospreys, and herons. Threatened rare plants include Arenarie paludicola (swamp sandwort) and Erythronium oregonum (fawn lily). Fur bearing animals dependent upon spawned out salmon carcasses for food include mink, raccoon, and otters.

Most of the streams in the basin currently display a pristine beauty and high water quality. Any significant decrease in the present amounts of water in the streams would endanger water quality and negatively impact upon the scenic, aesthetic, and environmental values of these streams.

A critical water related problem in WRIA 15 is the scarcity of available water supply sources to meet anticipated future municipal and industrial water supply demands. In some areas, most of the readily accessible supplies of ground water have already been appropriated (see pages 27-31). The problem is further aggravated by a seasonal population fluctuation. Many people seeking recreation visit the area only during the summer months, thereby increasing the demand for domestic water when the supply is at a minimum.

Additionally, since recharge of both surface waters and shallow ground water aquifers in the Kitsap Basin relies primarily upon precipitation, the base flows of many streams are derived from ground waters during the dry summer months. Consequently, tapping of the shallow aquifers for development of new ground water supplies could negatively impact instream flows.

Comprehensive water supply studies that were done by Kitsap County (1970), Mason County (1971), and Pierce County (1969) predicted that water supply demands on the Peninsula can be met through 1985-1990 by expansion of existing sources. Beyond 1990, it was expected that demands would have to be met from Olympic Peninsula streams. King County's Vashon

Community Plan (1979) discouraged importing water from off the island and initiated policies to plan future land uses and densities so that demands on the islands rechargeable ground water resources do not exceed its capacity to provide adequate supplies. Kitsap County's Comprehensive Plan, adopted in 1977, proposes the urban concentration concept for future physical development allowing rural areas to be developed only to the intensities and uses that do not require services (including water supply) and expenditures. The Kitsap Instream Resources Protection Program is not inconsistent with these local land use policies.

A recent U.S. Geological Survey study "Ground Water Availability on the Kitsap Peninsula" (1980) indicated that the average annual ground water recharge to streams on the Kitsap Peninsula is 17 times the 1975 annual ground water pumpage for the peninsula. While it was concluded that some unknown amount of this water is available for increased withdrawal by wells, it was acknowledged that increased withdrawals would cause decreased streamflow, declining water levels, and increased sea water contamination.

It. is the department's finding that ground water is available for development of community systems in certain areas of the Kitsap Peninsula. While future wells tapping relatively shallow strata that contribute to surface water flow are likely to be affected by the Instream Resources Protection Program, wells tapping only deeper zones are likely to be exempt. Also, any well tapping a shallow aquifer that does not have significant hydraulic continuity with a stream is likely to be exempt from the I.R.P. Program. The determination of whether a well will be subject to the regulations will be made on a case-by-case basis by the department's regional office when an application is received.

Storage facilities on streams that can support them are not precluded by the I.R.P. Program. Provisions are made in the rules for approval of storage facilities, subject to the establishment of critical period flows for drought or low runoff periods.

Because of the large number and small size of streams in the Kitsap Water Resource Inventory Area, only some of the major streams have long-term continuous hydrologic records and anadromous fish usage data. The streams proposed for action are those that have been documented as significant for fish and wildlife habitat by the Department of Fisheries (WDF) or the Department of Game (WDG) and Indian fishery management representatives, or those for which the Department of Ecology (WDOE) has determined that no water is available for additional consumptive appropriation. Streams have been separated into classes according to the data available for analysis. The department is proposing the following types of action for the different classes of streams:

1. Streams currently closed pursuant to water right recommendations made in the past by WDF and WDG in accordance with chapter 75.20 RCW will be closed by administrative rule under the Instream Resources Protection Program.

2. Instream flows are proposed for streams where:

   a. continuous records of flow are available

   b. flow correlation to streams with continuous records is possible.

   c. estimated annual average flow is greater than 5 cfs and analysis of flow frequency can be performed.

   Where it has been determined that streams in Class 2 do not have water available for additional consumptive appropriation, full-year or partial-year closure is proposed.

3. For streams with an estimated average flow of 5 cfs or less and a known high value for fish production, aesthetic and other environmental values, the department has determined that the minimum flow will be the natural flow. Because of documented high value for instream uses, streams under this classification are proposed for closure.

4. No action is proposed for the remaining streams in the Kitsap Basin (512 as identified by Garling-Molenaar - 1965). Instream flows for these streams and any others will be considered on a case-by-case basis as water right applications are reviewed by the Department of Ecology and departments of Fisheries and Game. New closure and instream flows may be incorporated into the rules when they are periodically reviewed.

The Kitsap Basin Instream Resources Protection Program will not affect any existing water rights. Future ground water withdrawals from shallow aquifers are likely to be affected by the program. Single domestic use of surface waters is exempt from the proposed rules, but is subject to the requirement of obtaining a surface water right. Single domestic water in amounts up to 5,000 gpd withdrawn from ground waters are not subject to the requirement of obtaining a ground water right permit.

Table 1 lists separately each stream proposed for action and indicates the type of action proposed for each stream. Appendix A contains the Proposed Administrative Rules. Appendix B contains a summary of all known streams and lakes in the Kitsap Water Resource Inventory Area (WRIA) 15.

TABLE I. Current Administrative Status and Proposed Status for Streams and Lakes in the Kitsap Water Resource Inventory Area (WRI9) 15.[1/] (Stream numbers correlate with Plate 1, modified from Darling-Molenaar, et al, 1965.)

Stream No.	Stream	Tributary to	Current Administrative Status	Proposed Action
7	Union River	Lynch Cove	Low Flow Limitation	All-year closure from mouth to McKenna Falls (RM 6.7)
12	Mission Creek	Hood Canal	Closed	All-year closure
13	Unnamed Spring	Little Mission	Low Flow Limitation	All-year closure (5 cfs or less)
18	Stimson Creek	Hood Canal	Open	All-year closure (5 cfs or less)
31	Unnamed Stream (Little Shoefly Creek)	Hood Canal	Open	All-year closure (5 cfs or less)
34	Shoefly Creek	Hood Canal	Low Flow Limitation	All-year closure (5 cfs or less)
44	Tahuya River	Hood Canal	Open	Instream flows, partial-year closure 6/15/-10/15
46	Caldervin Creek	Hood Canal	Open	All-year closure (5 cfs or less)
50	Unnamed Stream (Hall Creek)	Hood Canal	Low Flow Limitation	All-year closure (5 cfs or less)
52	Unnamed Stream (Hoddy Creek)	Hood Canal	Low Flow Limitation	All-year closure (5 cfs or less)
54	Fay Creek	Hood Canal	Open	All-year closure (5 cfs or less)
55	Brown’s Creek	Hood Canal	Open	All-year closure (5 cfs or less)
56	Unnamed Stream (West Creek)	Hood Canal	Open	All-year closure (5 cfs or less)
57	Unnamed Stream	Hood Canal	Closed	All-year closure
60	Renasland Creek	Hood Canal	Open	All-year closure
70	Dewatto River	Hood Canal	Open	Instream flows, partial-year closure 6/15-10/15

Stream No.	Stream	Tributary to	Current Administrative Status	Proposed Action
96	Anderson Creek	Hood Canal	Open	Instream flows
101	Harding Creek	Hood Canal	Open	All-year closure (5 cfs or less)
113	Stavis Creek	Hood Canal	Open	Instream flows
117	Seabeck Creek	Seabeck Bay	Closed	All-year closure
121	Big Beef Creek	Hood Canal	Open	Instream flows partial-year closure 5/15-11/1
124	Anderson Creek	Sinclair Inlet	Open	Instream flows, partial-year closure 6/1-11/1
158	Gamble Creek	Port Gamble	Closed	All-year closure
164	Unnamed Stream (Little Boston Creek)	Port Gamble	Open	All-year closure (5 cfs or less)
181	Unnamed Stream	Appletree Cover	Open	All-year closure (5 cfs or less)
184	Unnamed Stream	Appletree Cove	Low Flow Limitation	All-year closure (5 cfs or less)
190	Unnamed Stream	Puget Sound	Open	All-year closure (5 cfs or less)
192	Grovers Creek	Puget Sound	Open	Instream flows, partial-year closure 6/1-10/15
196	Cowling Creek	Miller Bay	Open	All-year closure (5 cfs or less)
198	Thompson Creek	Port Orchard	Open	All-year closure (5 cfs or less)
207	Unnamed Stream (Dogfish Creek)	Liberty Bay	Closed	All-year closure
208	Johnson Creek	Liberty Bay	Open	All-year closure (5 cfs or less)
213	Unnamed Stream (Scandia Creek)	Liberty Bay	Low Flow Limitation	All-year closure (5 cfs or less)
223	Unnamed Stream (Steel Creek)	Burke Bay	Low Flow Limitation	Partial-year closure 6/1-10/15

Stream No.	Stream	Tributary to	Current Administrative Status	Proposed Action
242	Mosher Creek	Dyes Inlet	Open	All-year closure (5 cfs or less)
245	Barker Creek	Dyes Inlet	Closed	All-year closure
246	Clear Creek	Dyes Inlet	Closed	All-year closure
248	Strawberry/Koch's-Cooks	Carpenter Lake	Low Flow Limitation	Instream flows, partial-year closure 6/1-11/1
259	Chico Creek (above Dickerson Creek confluence)	Chico Bay	Closed	All-year closure
	Lost Creek		Closed	All-year closure
	Wildcat Creek		Closed	All-year closure
	Kitsap Creek		Closed	All-year closure
	Chico Creek (from mouth to Dickerson Creek confluence	Chico Bay	Low Flow Limitation	All-year closure
	Dickerson Creek	Chico Creek	Low Flow Limitation	All-year closure
	Unnamed Stream	Kitsap Lake	Closed	All-year closure
268	Gorst Creek	Sinclair Inlet	Open	Instream flows
272	Anderson Creek	Sinclair Inlet	Open	All-year closure (5 cfs or less)
275	Ross Creek	Sinclair Inlet	Open	All-year closure (5 cfs or less)
279	Blackjack Creek	Sinclair Inlet	Closed	All-year closure
285	Unnamed Stream (Sullivan Creek)	Port Orchard	Closed	All-year closure
289	Beaver Creek	Rich Passage	Open	All-year closure (5 cfs or less)
294	Salmonberry Creek	Long Lake	Closed	All-year closure
294	Curley Creek	Puget Sound	Open	Instream flows, partial-year closure 6/15-10/15
313	Unnamed Stream	Olalla Creek	Low Flow Limitation	Instream flows, partial-year closure 6/1-10/15

Stream No.	Stream	Tributary to	Current Administrative Status	Proposed Action
321	Crescent Creek	Gig Harbor	Open	Instream flows, partial-year closure 6/1-10/15
322	North Creek	Gig Harbor	Open	All-year closure (5 cfs or less)
342	Unnamed Stream	Henderson Bay	Low Flow Limitation	All-year closure (5 cfs or less)
343	Meyer Creek	Lay Inlet	Low Flow Limitation	All-year closure (5 cfs or less)
354	Purdy Creek	Henderson Bay	Open	Instream flows, partial-year closure 4/15-11/15
356	Burley Creek	Burley Lagoon	Closed	All-year closure
367	Minter Creek	Henderson Bay	Closed	All-year closure
369	Lackey Creek	Carr Inlet	Open	All-year closure
402	Unnamed Stream (Dutcher Creek)	Dutcher Cove	Closed	All-year closure
407	Unnamed Stream	Vaughn Bay (N.D.)	Low Flow Limitation	All-year closure (5 cfs or less)
415	Rocky Creek	Case Inlet	Open	Instream flows, partial-year closure 4/15-11/15
425	Coulter Crek	Case Inlet	Open	Instream flows
434	Unnamed Stream	Murden Cove	Open	All-year closure (5 cfs or less)
461	Unnamed Stream	Fletcher Bay	Open	All-year closure (5 cfs or less)
510	Judd Creek	Quartermaster Harbor	Closed	All-year closure
514	Unnamed Stream (Fisher Creek)	Quartermaster Harbor	Low Flow Limitation	All-year closure (5 cfs or less)
530	Jod Creek	Christianson Cove	Low Flow Limitation	All-year closure (5 cfs or less)
540	Needle Creek and Tributaries	Colvos Passage	Open	All-year closure (5 cfs or less)

Stream No.	Stream	Tributary to	Current Administrative Status	Proposed Action
	Lakes			
	Stansberry Lake	Carr Inlet (N.D.)	Closed	All-year closure
	Mission Lake	Mission Creek	Closed	All-year closure

1/ Streams and lakes not on this list will be evaluated on a case-by-case basis as applications for appropriation are received. Those surface water source limitations effected after the date of adoption of the rules proposed in this document will be considered for incorporation in the rules at the first review of the program within five years.

PROGRAM AREA DESCRIPTION

The Kitsap Water Resource Inventory Area (WRIA) 15, lies in the Puget Sound trough between the Olympic Mountains on the west and the Cascade Mountains on the east. The basin is comprised of the Kitsap Peninsula and adjacent islands including Bainbridge, Vashon, Maury, Blake, Anderson, McNeil, Fox, Raft, Ketron, and Herron islands. Except for a narrow land area between Hood Canal and Case Inlet, WRIA 15 is surrounded by marine waters. It is bounded by Hood Canal on the west, Admiralty Inlet on the north, Puget Sound on the east, and Case Inlet, Nisqually Reach, Carr Inlet, and Henderson Bay around the southern boundaries. (See Figure 1 and Plate 1, back cover.)

All of Kitsap County and portions of King, Pierce, and Mason counties lie within the boundaries of the Kitsap Basin. The Port Gamble Klallam and Port Madison Suquamish Indian reservations, and the Bangor Naval Reservation are located in the northern part of the basin. Major cities and towns in the area are Bremerton, Port Orchard, Winslow, Silverdale (unincorporated), Poulsbo, Kingston (unincorporated), and Gig Harbor.

The economic base of the Kitsap Basin is supported primarily by forestry, recreation and summer tourism, and U.S. Naval Installations: Puget Sound Naval shipyard at Bremerton, Naval Torpedo Station at Keyport, and the Pacific Polaris Missile Facility and Trident Nuclear Submarine Base at Bangor.

Bremerton is the dominant commercial center within the basin, and the Port of Bremerton, southwest of the city, provides manufacturing sites for light industries.

The Tacoma Industrial Airport and related industries located on the south end of the Gig Harbor Peninsula are also major economic forces in the Kitsap Basin.

The largest areas of forest land use are in the southern and western Tahuya Peninsula (Mason County). A mill at Port Gamble is the largest lumber operation in the Kitsap Basin, and there are more than twenty-five smaller mills and approximately one hundred and fifty logging firms operating throughout the region.

Population in WRIA 15 is projected by the Puget Sound Council of Governments to increase to over 311,000 by the year 2000, more than double the 1970 population. Table 2 indicates population projections by county and portions of counties located in the basin in 10-year increments.

TABLE 2.

POPULATION PROJECTIONS FOR THOSE PORTIONS OF KITSAP, KING, MASON, AND PIERCE COUNTIES WITHIN THE KITSAP BASIN (WRIA 15)

	1970	1980	1990	2000
Kitsap County				
Resident	101,732	144,900	177,500	194,600
Seasonal	10,000	11,500	13,410	15,510
Total	111,732	156,400	190,910	210,110
King County				
Resident	6,516	7,377	9,604	11,489
Seasonal	1,925	2,115	2,320	2,552
Total	8,441	9,492	11,924	14,041
Mason County				
Resident	2,120	3,314	3,859	4,404
Seasonal	3,620	7,250	14,900	28,000
Total	5,740	10,564	18,759	32,404
Pierce County				
Resident	14,309	28,277	34,096	45,196
Seasonal	4,978	27,430	42,996	76,749
Total	19,287	55,707	77,092	121,945
Basin Totals				
Resident	124,677	183,868	225,059	255,689
Seasonal	20,523	26,934	38,655	56,062
Total	145,200	210,802	263,714	311,751

Sources: Residential population figures are from the U.S. Bureau of Census and the Puget Sound Council of Governments (PSCOG). The 1990 and 2000 residential figures from PSCOG are preliminary. Seasonal population figures are from 1975 projections by the Puget Sound Governmental Conference (now PSCOG), the State of Washington Office of Program Planning and Fiscal Management (now Office of Fiscal Management), and the U.S. Navy.

WATER RESOURCES

As a result of its relatively small size and irregular shape, only a few major stream systems have developed on the Kitsap Peninsula. Most of the area is drained by short streams that discharge directly into the surrounding marine waters. A total of five hundred and eighty two (582) streams and one hundred eighty two (182) lakes, reservoirs, ponds, and marshes have been inventoried in the Kitsap Water Resources Inventory Area (Garling-Molenaar et al., 1965). The majority of the streams identified are small and unnamed. Consequently, the Garling/Molenaar Inventory numbered the streams consecutively as they occur in the basin starting from the most southeastern point of Hood Canal and running clockwise around the basin. Table 1, Appendix B lists the area's streams numerically in correlation with Plate 1. Table 2, Appendix B summarizes all known named lakes and all unnamed lakes one acre or more in surface area (Wolcott, 1973). Garling-Molenaar et al. (1965) divided the Kitsap Water Resource Area into nine physiographic provinces (Figure 1). That division is used herein as a logical means of locating and discussing major stream systems, ground waters, and storage basins. The physiographic map should be used in conjunction with Plate I, back cover.

STREAMS AND LAKES

WESTERN UPLAND - The western upland includes the entire western part of Kitsap County and the Tahuya Peninsula portion of Mason County. Excluding the Green Mountain-Gold Mountain hills, the altitude of the surface is generally 300 to 600 feet above sea level. All significant streams in this area are utilized by salmon and trout.

Major streams of the Western Upland are described below:

Union River (#7): The Union River originates about 5 miles west of Bremerton and east of Gold Mountain, and flows for 10 miles in a south-southwesterly direction to discharge into Hood Canal near the Town of Belfair. The Union River and its tributaries drain an area of 23.4 square miles.

Analysis of continuous streamflow records at two gage sites on the Union River system for the period 1947 through 1959 indicates the natural water yield during the period of record was reasonably consistent. A generally uniform and constant base flow was exhibited throughout periods of low precipitation indicating that ground water is the primary contributor to streamflow during the summer months. An abrupt rise in flow averages during September and October indicates that surface runoff becomes an important flow factor during periods of higher precipitation. According to the Garling-Molenaar study the lowest flows normally can be expected during the last week of August and the first three weeks of September.

In 1957, the City of Bremerton completed construction of Casad Dam and the Union River Reservoir. This source provides the major portion (80%) of the municipal and industrial water for the Bremerton water supply area, including the U.S. Navy Shipyard at Bremerton. Currently, Bremerton has water rights on the main stem of the Union River for a diversion of 25 cfs and storage of 4,000 acre-feet behind Casad Dam and 1,200 acre-feet at the Twin Lakes Reservoir. The city has an additional water right for diversion of 5 cfs on the East Fork Union River.

Low flows have been established on the Union River under chapter 75.20 RCW. Closure of the stream has been recommended by the departments of Fisheries and Game, U.S. Fish and Wildlife Service, Point-No-Point Indian Tribal Council, and the U.S. Bureau of Indian Affairs. The department is proposing closure of the stream from the mouth to McKenna Falls (R.M. 6.7).

Twin and Lider lakes are the only significant sources of natural surface storage within the Union River Basin.

Mission Creek (#12): Mission Creek originates approximately 8 miles west of Bremerton and courses in a southwesterly direction for about 9 miles, draining an area of 13.6 square miles before discharging into Hood Canal.

Low flow discharge-duration hydrographs for two gages for the period 1946-60 show that summer flows are more variable at the upstream site, indicating that ground water discharge provides a greater percentage of the downstream flows (Darling-Molenaar, 1965). Consequently, flows during the summer are more dependable in the lower reaches of the stream. Lowest flows can be expected during the period from about August 25 to the end of September. Mission Creek is currently administratively closed to additional appropriations.

The major sources of natural surface water storage in the Mission Creek Basin are Mission and Tiger lakes. Smaller quantities are retained in Larson Lake, another small unnamed lake and several intermittent marsh areas.

Little Mission Creek (#13): Little Mission Creek originates in the northeast section of Mason County and flows south into Hood Canal at a location approximately two miles southwest of Belfair, draining an area of 1.74 square miles. Miscellaneous flow data is available for the years of 1947, 1958, and 1959. The minimum recorded discharge is 2.02 cfs on August 25, 1947. Little Mission Creek is currently under a low flow restriction.

Stimson Creek (#18): Stimson Creek originates in the northeast corner of Mason County and flows south into Hood Canal at a location four miles southwest of Belfair. It drains an area of 1.86 square miles. Miscellaneous flow data is available for the years of 1947, 1958 and 1959. The minimum recorded discharge is 0.82 cfs on. August 25, 1947.

The departments of Fisheries and Game have recommended closure of Stimson Creek because of expanding use by fish and critical low flow levels that occur during the summer months.

Tahuya River (#44): The Tahuya River originates in a swampy area approximately 9 miles west of Bremerton and flows in a general southwesterly direction for about 20 miles to drain an area of 45.1 square miles before discharging into Hood Canal near the Town of Tahuya.

Gold Creek, one of the most important tributaries, joins the main river, about a mile from its source. Panther Lake, one of the larger lakes in the basin, discharges into the main stem of the Tahuya River by way of Panther Creek about 4 miles downstream from the stream's source. Of the many small tributaries along the lower reaches of the Tahuya, Little Tahuya Creek is probably the most important. This stream drains Lake Wooten, Haven Lake, and Twin Lakes and joins the main stem of the Tahuya River about 12 miles from its source.

The Garling-Molenaar study (1965) found that during extended dry periods, the Tahuya River becomes influent to the ground water system approximately 3/4 miles south of Tahuya Lake. Some of this water reappears at the surface to return to streamflow about 5 miles further downstream, but there is evidence to indicate that sizeable quantities eventually discharge into the channels of other adjacent stream systems through ground water migration. The high unit runoff of DeWatto River (#70) implies that this system could be the recipient of some of this water.

In 1961 a dam was constructed on the Tahuya River, a short distance below the confluence of Gold Creek to deepen and enlarge Lake Tahuya for purposes of land development and recreation. The project raised the level of Tahuya Lake from its original elevation of 582.5 feet to 590.1 feet, increasing the storage capacity from about 100 acre-feet to 1650 acre-feet. Natural storage is also provided by the large lakes mentioned above and many smaller lakes, ponds and intermittent marshes.

Rendsland Creek (#60): Rendsland Creek is located in the southwestern tip of the Tahuya Peninsula. It has 5.3 miles of main stem plus 4.4 miles of tributaries. The stream flows in a southeasterly direction and enters Hood Canal between Musqueti Point and Ayres Point. Rendsland Creek is quite stable and provides excellent spawning conditions for anadromous fish, with nearly four miles of main stem accessible to these fish. Coho salmon spawn and rear in the upper reaches above areas of intermittent flow, while chum salmon spawn mostly in the lower reaches of the stream.

Dewatto River (#70): The main channel of Dewatto River originates about a mile southeast of Holly and flows in a south-southwesterly direction paralleling Hood Canal for about nine miles draining an area of 22.0 square miles until it reaches Dewatto Bay, an arm of Hood Canal.

The Garling-Molenaar study found that actual runoff in the stream is greater than annual runoff potential calculated from annual precipitation. There is evidence to indicate that some of the discrepancy can be attributed to natural inter-basin ground water transfer, i.e., ground waters originating in the adjacent Tahuya River Basin could be contributing flow to the Dewatto River system through continuous aquifers which are not hydraulically controlled by surface topography. It was found that the annual yield of this stream is more consistent and dependable than other major drainages in the area. It is thought possible that a runoff lag resulting from the large ground water contribution to this stream system may have some influence in reducing the annual runoff variability. The discharge duration hydrograph of Dewatto River indicated that ground water contributions, practically without exception over the period of measurement (1947-54), maintained a flow of over 10 cfs at USGS Gage No. 0685 during the rain deficient summer months. Generally, minimum flows occur sometime in August, September, or early

October. The expected flow variability for June, July, and August is very low, again implying that ground water is a major contributor to streamflow during these months. The sudden rise in flow in September and October reflects an increase in direct surface runoff from fall rains.

The largest quantities of natural surface storage in the Dewatto River Basin occur in Cady Lake, Shoe Lake, Larson Lake, Oak Lake, and Erickson Lake. Smaller lakes, ponds, and marshes are scattered throughout the drainage area.

Anderson Creek (#96): Anderson Creek (#96) originates in the western regions of Kitsap County flowing north into Hood Canal at a location approximately seven miles southwest of Seabeck. It has a drainage area of 5.17 square miles. There is miscellaneous flow data for the years of 1947, 1951, 1958 and 1959. The minimum recorded discharge is 5.59 cfs on .July 21, 1959. (This creek is correlated to the Dewatto River for hydrologic base flow determination.)

Stavis Creek (#113): Stavis Creek originates in the western regions of Kitsap County, flowing north into Hood Canal about two miles southwest of Seabeck. It drains an area of 5.92 square miles. There is miscellaneous flow data for the years of 1947, 1958 and 1959. The minimum recorded discharge is 7.03 cfs on August 7, 1959. (This creek is correlated to the Dewatto River for hydrologic base flow determination.)

Big Beef Creek (#121):

Big Beef Creek originates about six and a half miles southwest of Seabeck and flows north into Big Beef Harbor on Hood Canal. It drains an area of 13.8 square miles at gage no. 12069550, and has an average discharge of 40.0 cfs.

The maximum discharge of record was 757 cfs on December 7, 1970. The minimum discharge of record was 2.29 cfs on September 2, 1974 (at R.M. 1.5). The gaging period of record for this stream is August 1969 to current date. William Symington Lake, an artificial impoundment created for recreational purposes is located in the upper reach of Big Beef Creek just north of Tahuya Lake. The dam impounding the lake contains a fish ladder that provides passage for anadromous fish to the upper reaches of Big Beef Creek. William Symington Lake drains an area of 6.95 square miles and covers a surface area of 60 acres.

Dogfish Creek (#207): The West Fork of Dogfish Creek originates in a marshy area about 4 miles north of Poulsbo and flows through Big Valley in a generally southerly direction. The East Fork has its source in the Northern Upland about 2 miles northeast of Poulsbo and flows in a southwesterly direction toward Big Valley. Approximately a mile north of Poulsbo the two forks join to form the main stem which then continues southwesterly for about three quarters of a mile to Liberty Bay. The system drains a surface area of 7.63 square miles.

Actual measured runoff for the period 1946-60 was greater than the potential yield projected from measured precipitation. There is evidence (Garling-Molenaar, 1964) that the discrepancy could be partially attributed to an inflow of ground water from adjacent areas outside the basin.

While most streams in the southern part of the area exhibit minimum flows toward the end of August or in September, the lowest flows in Dogfish Creek usually occur in late July or early August. This effect can very likely be attributed to irrigation diversions by individuals and the 0.8 cfs average use from related springs and wells by the City of Poulsbo water department. Dogfish Creek and its tributaries are currently closed to further appropriations.

The watershed has no lakes but some surface storage is provided in the large marshy area near the source of the West Fork of Dogfish Creek.

Chico Creek (#259): Chico Creek and its four major tributaries drain a 16.0 square mile area located a few miles northwest of Bremerton and immediately northeast of Green and Gold mountains. Wildcat Creek, situated in the northwestern part of the basin, is the largest tributary and receives runoff from over one-third of the entire area. Originating at Wildcat Lake, this stream courses southeasterly for nearly 2 miles to its confluence with Lost Creek about 2 miles above tide water. The area immediately south of the Wildcat Creek watershed is drained by Lost Creek which heads approximately a mile east of Green Mountain and follows a general. northeasterly course for about 3 miles to its confluence with Wildcat Creek. Below this point the main stream is referred to as Chico Creek. Dickerson Creek flows into Chico Creek from the south about a mile downstream from the Wildcat-Lost Creek confluence. The discharge from Kitsap Creek enters the main channel of Chico Creek a short distance below Dickerson Creek.

Large portions of the Chico Creek Basin are geologically and topographically unsuited for natural storage of appreciable amounts of ground water. Consequently, certain reaches of the streams in this drainage basin tend to recede rapidly after a storm, and little water is retained in those areas as shallow ground water to maintain base flow during dry periods.

Chico Creek and its tributaries except for Dickerson Creek are currently administratively closed to further appropriation. Dickerson Creek is under a low flow limitation, and the Departments of Fisheries and Game have recommended closure for this stream.

Surface storage in the Chico Creek Basin is provided by Wildcat and Kitsap lakes and several marshes, with some storage in the Beaver Dam Lake of the Dickerson Creek Basin.

Gorst Creek (#268): Gorst Creek drains a 9.08 square mile area located at the northeast end of the Union River-Gorst Creek Valleys. The main stream originates near the community of Sunnyslope and follows a north-northwesterly direction turning east at the old Navy Yard Highway and finally discharging into the western end of Sinclair Inlet at Gorst. Two major tributaries, Parish Creek and Heins Creek join the main stem immediately west of Gorst.

The City of Bremerton owns approximately 99 percent of the Gorst Creek watershed. The city's water supply pumping station was constructed on Gorst Creek in 1911, and provided water from the stream for a part of Bremerton's water supply until 1978 when the Department of Social and Health Services stopped that use because of pollution in the water shed.

Bremerton currently has a water right claim on Gorst Creek for 15 cfs. Gorst is connected by pipeline to Twin Lakes and the Union River. Upon several occasions, when water demand was high at the Navy shipyard, the city has pumped more than 15 cfs of water from that system through the Gorst Creek pumping plant.

The minimum recorded discharge of Gorst Creek is 7.68 cfs on August 28, 1947 based on miscellaneous flow data for the years 1947, 1958, and 1959.

A small amount of natural surface storage is provided by Heins, Alexander, and Jarstad lakes.

Small Streams

Certain small streams are proposed for closure in Appendix A. Streams of the Western Upland described under WAC 173-515-040(1) are: #57 Unnamed Stream and #117 Seabeck Creek.

Streams described under WAC 173-515-040(2) are: #124 Anderson Creek and #248 Unnamed Stream (Strawberry/Kochs/Cook).

Streams described under WAC 173-515-040(3) are: #31 Unnamed Stream (Little Shoefly Creek, #34 Shoefly Creek, #46 Caldervin Creek, #50 Hall Creek, #52 Hoddy Creek, #54 Fay Creek, #55 Brown Creek, #56 Unnamed Stream (West Creek), and #101 Harding Creek, #272 Anderson Creek, #275 Ross Creek, and #289 Beaver Creek.

SOUTHERN UPLAND - Land surface elevation in the southern upland, which occupies the south part of Kitsap County and parts of Pierce and Mason counties, ranges from sea level to 450 feet. Included in the southern upland is Blake Island, located in Puget Sound north of Harper.

The area is drained by many small creeks and several large streams. All of the streams are important for anadromous fish habitat. The southern upland also contains several lakes and numerous ponds. The largest, Long Lake, at the head of Curley Creek, lies in the east-central part of the upland close to the divide between Curley Creek and Olalla Creek. Many smaller lakes and ponds are located in the western part of the province.

Major streams of the Southern Upland are described below:

Blackjack Creek (#279): Blackjack Creek drains a 12.4 square mile area lying immediately south of Port Orchard. The main drainage follows a general northeasterly course for approximately 6 miles from the 520 feet altitude at the divide near Square and Mathews lakes to discharge in Sinclair Inlet at Port Orchard.

Actual measured runoff of the Blackjack Creek system for the period 1946-60 was less than the projected potential yield from precipitation, which implies either inadequate data or a loss of ground water to adjacent drainages. Despite the possible loss and numerous water diversion rights on Blackjack Creek, ground water discharge into the stream system is generally sufficient to maintain a reasonably high base flow. Blackjack Creek is currently closed to further appropriations.

Several small lakes, including Deep Lake, Berry Lake, Square Lake, and Mathews Lake, provide surface storage within the basin.

Curley Creek - Salmonberry Creek (#294): Curley Creek starts in Southeastern Kitsap County flowing northeast into Puget Sound between the communities of Colby and south Colby, draining an area 14.2 square miles. There is miscellaneous data for 1947, 1958, and 1959. The minimum recorded discharge was 3.13 cfs on July 29, 1958. Salmonberry Creek is currently closed. Curley Creek is open and is correlated to Gold Creek for hydrologic base flow determination.

Olalla Creek (#313): Olalla Creek starts in southeast Kitsap County flowing south, then turning east into Olalla Bay on Colvos Passage. It drains an area of 6.10 square miles. There is miscellaneous flow data for the years of 1947, 1958, and 1959. The minimum recorded discharge is 3.03 cfs on July 28, 1958.

Crescent Creek (#321): Crescent Creek starts in the northwest corner of Pierce County from Crescent Lake and flows south into Gig Harbor. It drains 5.58 square miles. There is miscellaneous flow data for parts of 1947, 1958, and 1959. The minimum recorded discharge was 1.27 cfs on July 31, 1947. This creek has low summer flows.

Purdy Creek (#354): Purdy Creek originates in South Central Kitsap County and flows south into Henderson Bay near Purdy. It drains 3.47 square miles. The maximum recorded discharge was 113 cfs on December 15, 1959. The minimum recorded discharge was 1.3 cfs observed on June 27 and August 2, 1962. The period of record is from 1959 to 1962 with a break extending from October 1960 through April 1961. This stream is correlated with Dogfish Creek (#207) for hydrologic base flow determination.

Burley Creek (#356): Burley Creek originates about a mile west of Long Lake and follows a southerly course for approximately 5 miles to Burley lagoon at the end of Henderson Bay. Like Blackjack and other creeks in the Kitsap Basin, Burley Creek displays an exceptionally high base flow implying that some of the ground water contribution is derived from precipitation originally collected in adjacent watersheds. Burley Creek is currently closed to further appropriations.

Surface water storage in Burley Creek Basin is limited to Horseshoe Lake and a few intermittent ponds.

Minter Creek (#367): Minter Creek and Huge Creek (#367), its major tributary, drain a 15.9 square mile area located a few miles west of Burley. Both streams follow converging southerly courses to their confluence near the south end of the basin. From this point the main stem

continues southward for approximately 2 miles to its mouth at the head of Minter Bay. Studies have indicated that inter-basin ground water transfer is occurring in the Huge Creek Basin, but it is not certain whether the water reappears as runoff in other parts of Minter Creek Basin or is actually lost to adjacent drainages. Tributaries in the northern part of the basin are mostly intermittent, but farther south increasing ground water discharge maintains relatively uniform perennial base flows. Both Minter Creek and Huge Creek are currently closed to further appropriations.

Some surface water storage is provided in the Minter Creek watershed by Lake Flora, Wicks Lake and several small marsh areas.

Rocky Creek (#415): Rocky Creek originates in the south central corner of Kitsap County and flows south through Pierce County into Rocky Bay. It drains 18.3 square miles with miscellaneous flow data for the years of 1947, 1958 and 1959. The minimum recorded discharge is 3.49 cfs on August 29, 1947. This creek is correlated with the Dewatto River (#70) for hydrologic base flow determination.

Coulter Creek (#425): Coulter Creek originates in the south corner of Kitsap County, southeast of Bremerton about 10 miles. It flows southeast into North Bay, north of the town of Victor and drains an area of 14.1 square miles. There is miscellaneous flow measurements for the years of 1947, 1958 and 1959. This stream is correlated to Dogfish Creek (#207) for hydrologic base flow determination.

The Department of Fisheries (WDF) was issued water right permits for a total of 27 cfs on Coulter Creek for hatchery use. WDF feels that this amount provides adequate protection for instream flows and consequently does not make any recommendations for this stream. The Department of Game is recommending closure. The department of Ecology is proposing low flows only.

Small Streams

Certain small streams of the Southern Upland are proposed for closure in Appendix A: #285 Sullivan Creek (WAC 173-515-040(1), #369 Lackey Creek (WAC 173-515-040-2), and #272 Anderson Creek, #242 Mosher Creek, #275 Ross Creek, and #289 Beaver Creek (WAC 173-515-040(3).

NORTHERN UPLAND - Land areas ranging in elevation from sea level to 480 feet are drained by short streams that discharge into the surrounding marine waters. Important anadromous fish streams in the Northern Upland are: #158 Gamble Creek, #164 Unnamed Stream, #181 Unnamed Stream, #184 Unnamed Stream, #190 Unnamed Stream, #192 Grovers Creek, #196 Cowling Creek, #198 Thompson Creek, and #208 Johnson Creek. Of the above, only Grovers Creek is being proposed for instream flows. All others are being proposed for closure under WAC 173-515-040(1) and (3).

CENTRAL UPLAND - Land areas ranging in elevation from sea level to 480 feet are drained by short streams that discharge into the surrounding marine waters. Important anadromous fish

streams are described in Appendix A: 4245 Barker Creek and #246 Clear Creek are described under WAC 173-515-040(1); #223 Steel Creek is described under WAC 173-515 -040(2); #213 Scandia Creek and #241 Mosher Creek are described under WAC 173-515-040(3).

BAINBRIDGE ISLAND - Altitudes range from sea level to 425 feet and, as with the central and northern uplands, drainage is by small, short spring-fed streams that discharge into Puget Sound. Streams on the island (#461 ann unnamed) are important salmon and trout streams: #434 Unnamed Stream and #461. Unnamed Stream are proposed for closure. These streams are described under WAC 173-515-040(3).

VASHON AND MAURY ISLANDS - These two islands are the only parts of the Kitsap Basin that lie within King County. They are joined by a narrow isthmus and are each drained by small streams that flow into the surrounding marine waters. Several streams on Vashon Island have been proposed for action: #510 Judd Creek is described under WAC 173-515-040(1) and #514 Fisher Creek, #530 Jod Creek, and #540 Needle Creek are described under WAC 173-515-040(3).

GIG HARBOR PENINSULA-FOX ISLAND - Both are located in Pierce County at the southeast corner of the southern upland. The Gig Harbor Peninsula is drained by many streams that flow into the surrounding marine waters. Significant streams on the Peninsula, provide valuable anadromous fish habitat. Streams proposed for closure are #332 North Creek, #342 Unnamed Stream, and #343 Meyer Creek. These streams are described under WAC 173-515-040(3).

LONGBRANCH PENINSULA - The Longbranch Peninsula, also in Pierce County, extends from the southwest corner of the southern upland, and includes Herron Island. This area is drained by short streams and springs that issue from its relatively steep slopes, and longer streams that drain the uplands. Most streams are utilized by anadromous fish. The streams proposed for action are #402 Unnamed Stream (Dutcher Creek) WAC 173-515-040(1) and #407 Unnamed Stream (WAC 173-515-040(3).

ANDERSON ISLAND - Anderson Island has a maximum elevation of approximately 280 feet above sea level. Drainage is primarily by short streams and springs. The largest are the two that flow into Oro Bay.

Two natural lakes, Lake Florence and Josephine Lake, occupy connected depressions on the northeastern part of the island.

GROUND WATERS

All recharge to the shallow ground water aquifers and surface systems of the Kitsap Peninsula is from precipitation falling directly on the land surface and infiltrating to the water table. Natural and artificial surface storage basins collect precipitation where it is released slowly to the ground water system, and ultimately to streams that may be in hydraulic continuity with an aquifer or discharge directly to salt water.

Practically all streams in the Kitsap WRIA are augmented by ground water discharge and many would go dry if ground water were insufficient to maintain flows during periods of low precipitation. There is evidence that some aquifers are continuous beneath several drainage basins. Often, the direction of ground water movement is independent of surface topography, allowing some of the precipitation received in one watershed to be transferred as ground water to adjacent or nearby basins. This transfer of water occurs in perimeter areas along the shores of the Kitsap Peninsula and nearby islands where small spring fed streams often exhibit more runoff than could be collected from precipitation within their own basin boundaries. This occurrence is also common in larger stream basins such as the Tahuya and Dewatto River basins.

Ground water occurrence in most of the Kitsap Basin has been evaluated from well log data for the area. A general description follows:

Deep Wells - In the past (except in a few notable cases), wells penetrating the deeper deposits underlying the Kitsap Peninsula were generally unsuccessful in producing large supplies of ground water. This is due primarily to the fineness and general impermeability of the materials commonly encountered at depths greater than 150 feet below sea level. In recent years however, according to the U.S. Geological Survey, there have been enough successful deep wells to indicate the possibility of untapped aquifers lying below these great depths. Some concern has been expressed by others that this may be "trapped" water with no probability of recharge through overlying impermeable rock units.[2/]

Shallow Drilled Wells - Drilled wells that have most successfully produced ground water are those that have tapped the sand and gravel aquifers occurring within the saturated lower portions of the Colvos Sand. The aquifers usually occur below the regional water table which lies above sea level along the shorelines and rises inland to 100-150 feet or more above sea level.

Dug Wells - In many of the settled upland areas domestic water is obtained from perched ground water tapped by shallow dug wells, usually around 15 to 30 feet deep. In most cases, this construction has not required the services of well drillers and little information is available on these wells.

Springs - Many springs and seeps (classified under state law as surface waters) issue from the top of impermeable silts and clays of the Kitsap Formation and Colvos Sand in WRIA 15. The silts and clays serve as perching layers that block downward migration of much of the precipitation that falls upon the area. The springs contribute an important part of the base flow of surface streams and provide domestic supplies for both individual homes and communities throughout the area.

[2/] King County Division of Planning. Vashon Community Plan/Proposed. Seattle, 1979.

WATER USE

INSTREAM USES

Recreation

Although most water-related recreation in the Kitsap Basin is associated with the salt water channels and shorelines surrounding the Peninsula, boating, sport fishing, and swimming are common on all freshwater lakes and streams large enough to accommodate these activities.

Fish

All of the major streams of the Kitsap Basin support significant runs of at least two anadromous salmon species, with small independent streams supporting impressive numbers of salmon spawners. The Department of Fisheries has observed that a remarkably high proportion of Puget Sound salmon production is from the Kitsap Basin when considering the total volume of water available in the basin's streams. Historical records of chum and coho salmon production in the basin indicate a direct relationship to the amount of water available during the low flow summer periods.

In addition to providing spawning and rearing habitat for fishes, the fresh waters of the streams modify the environment of the shallow shelves, bays, and channels surrounding the peninsula, providing rich feeding areas for anadromous fishes. These waters are also vital for marine fish and shellfish resources in providing mixing and transition zones from the cool, dense, saline ocean waters to the warmer, shallow, less saline water layers.

The Department of Fisheries artificial salmon production operations presently include the Minter Creek Hatchery and the three satellite Stations at Coulter Creek, Fox Island, and Gorst Creek. The Minter Creek Salmon Hatchery is the only complete artificial production facility within the Kitsap Peninsula Basin. Satellite facilities are for rearing and release only. Coho, fall chinook, and chum salmon releases from the Minter Creek hatchery totaled 9.8 million for the 1978-79 fiscal year. Chinook and coho salmon continue to be important at all facilities, while chum salmon production currently represents a major effort at Minter Creek and Coulter Creek. Pink salmon are given only minor priority. The chum and fall chinook releases from Coulter Creek this fiscal year are projected to total 3.66 million, while one-half million fall chinook will be released from Gorst Creek.

The University of Washington, College of Fisheries, operates the Big Beef Creek Fish Research Station on 290 acres at the mouth of Big Beef Creek. Fisheries research has been conducted since 1966 on the production of salmonids in spawning channels, hatchery, and stream environments.

Tribal hatchery projects are also conducted in the Kitsap Basin. The Port Gamble Klallam Tribe released 2.5 million chum and 47,000 pink salmon from the Little Boston Creek Hatchery in 1979. The Port Madison Suquamish Tribe released 2.85 million chum and fall chinook from Grovers Creek and Cowlings Creek egg boxes.

Several cooperative salmon culture projects are conducted by local clubs or groups in the Kitsap Basin. During the 1978-79 season, cooperative projects included those involving the Gig Harbor Civic Club on North Creek, Gig Harbor Key Club/Peninsula Kiwanis Club in Gig Harbor, and the Peninsula High School's Purdy Creek station.

Salmon Utilization

Chinook - Chinook salmon are susceptible to high mortality rates when subjected to overcrowded conditions in streams and are only present in those streams with flows adequate to maintain the life functions of the fish. These streams include Coulter Creek, Union River, Tahuya River, Dewatto River, and Burley Creek, with incidental occurrences in a few other streams. Their overall production in the basin is limited because of the small size of the streams, as well as their nature to spawn early in the fall of the year when flows are near their annual low level. Escapement levels for chinook have been revised downward slightly in recent years with better data now being available. The present escapement goal is approximately 950 chinook (550 for East Kitsap, and 400 for West Kitsap). Actual escapements may be larger or smaller.

Coho - Coho utilize all of the accessible independent lowland streams of the Kitsap Peninsula. Spawning occurs in every independent stream and tributary where suitable conditions exist, particularly in the upper headwaters. Coho inhabit the most remote rivers as well as the springs, swamps, and marshes. Coho juveniles rear throughout accessible lengths of streams as well as in the associated estuaries and marine habitats.

Estimates of adult coho spawning escapements to West Kitsap streams 1960-1970 have ranged from 9,100 to 30,100, averaging 19,000 annually. Escapement to the east Kitsap rivers and streams ranged from 6,650 to 27,800, averaging 16,650 coho annually.

Chum - Impressive runs of chum salmon occur in most Kitsap streams and are found in nearly every accessible stream. It is estimated that east Kitsap streams had annual chum escapements ranging from 27,200 to 85,700 for the period 1966-1971, averaging about 46,850 annually. In west Kitsap rivers and streams chum salmon escapements were estimated to range from 20,250 to 47,500, averaging 29,500 annually.

Trout Utilization

Virtually all streams of the Kitsap Peninsula support game fish. According to the Department of Game, any streams having salmon also support significant steelhead runs. Sea run cutthroat trout thrive in the absence of competition from steelhead and salmon and are found in most of the streams which do not support salmon or steelhead trout, as well as in headwaters of salmon and steelhead producing streams.

Wildlife Utilization

Eagles, ospreys, and herons, all wildlife species of special concern in Washington, depend upon fish production for food. Protection of instream flows will benefit these animals directly. Of the

rare plants in the Kitsap Basin, Arenaria paludicola (swamp sandwort) and Erythronium oregonum (fawn lily) are both listed as threatened in the 1975 Federal Register, and both would be affected by changes in stream flow. Furbearing animals dependent upon spawned out salmon carcasses for food include mink, raccoon, and otters.

Aesthetics and Environmental Values

The hundreds of independent drainages of the Kitsap Basin are all small in size and most exhibit extremely low seasonal flows. Although most of the streams currently display a pristine beauty and comparatively high water quality, any significant decrease in the normal amounts of instream flows would adversely impact natural stream characteristics. The Instream Resources Protection Program will help to preserve the aesthetic qualities and environmental values of streams proposed for instream flows or closures under the program.

OUT-OF-STREAM USES

Irrigation

Most farms in WRIA 15 are relatively small in size, primarily because of the irregular topography of the basin, limiting soil types, and high land values. Productive agricultural lands are usually found in old glacial lake basins and areas adjacent to small streams and lakes scattered throughout the basin.

Surface water right certificates and permits for irrigation, effective as of November 25, 1980, totaled 359 issued for 3,407 acre-feet of water per year.

Domestic and Municipal Water Supply

The Department of Social and Health Services (DSHS) has inventoried 829 water supply facilities in the Kitsap Basin. Of the 829 total, 774 have two or more services and are defined by DSHS criteria to be public water supply facilities. Only two of the single service facilities, a grocery store and a seasonal campground, tap surface water sources for water supply. Seventy-nine (79) of the public water suppliers tap springs for water supply, and 7 suppliers divert water from streams and one lake. Remaining water suppliers use ground water sources. Table 3 indicates the major water suppliers that use surface water sources, the source of supply, and amounts in gallons per day (gpd) and cubic feet per second (cfs) appropriated on an annual average.

Table 3.

Major Water Suppliers Using Surface Water	Surface Water Source	Average Use, 1979 (gpd)	(cfs)
City of Bremerton	Union River, Anderson Creek, and Gorst Creek	7,500,000	11.60
Hansville Water District	Spring	44,919	0.07
Harbor Springs Water System	Spring	20,500	0.03
The Heights Water Corporation	Spring	84,665	0.13
Keyport Water System	Spring		
Manry Mutual. Water Company	Spring	12,000	0.02
North Bainbridge Water Company	Spring	75,625	0.12
North Vashon Water Company	Spring	9,100	0.01
Paradise Cove	Spring	8,750	0.01
Pleasant Cove Water Assoc.	Spring	15,000	0.02
Port Madison Water Co.	Spring	10,800	0.02
City of Poulsbo	Spring	506,705	0.78
Sandy Hook Community	Spring	19,500	0.03
South Bainbridge Water Com.	Spring	15,000	0.02
Taree, Inc.	Spring	11,250	0.02
Viewside Comm. Water System	Spring	11,250	0.02
West Anchor, Park	Spring	15,000	0.02
West Side Water Co.	Spring	45,000	0.07

WATER AVAILABILITY

A recent study of ground water availability on the Kitsap Peninsula (U.S. Geological Survey, 1980) concluded that the ground water recharge to Kitsap streams is 17 times the 1975 annual pumpage of ground water. This would indicate that some ground water is available for future community development. The USGS predicted that if pumpage is increased from the upper and lower water bearing strata, (1) ground water levels will decline in both strata, (2) streamflow and spring flow will be decreased, (3) lateral outflow in both bodies will be decreased, and (4) sea water intrusion will be initiated or accelerated. (No widespread sea water contamination was found to exist at the present time.)

The USGS study further indicated that if pumpage is increased in the upper water bearing strata alone, downward leakage to the lower water bearing strata will be decreased. If pumpage is increased from the lower water bearing strata alone, the downward leakage will be increased. These effects are expected, in general, to be localized depending on the magnitude and distribution of pumpage.

The Department of Ecology recommends that storage projects be considered as a potential for future localized water supply sources. It currently appears that several streams on the Kitsap Peninsula could provide some water to meet future water supply demands with the proper implementation of environmentally acceptable storage facilities. This possibility would have to be investigated on a stream-by-stream basis as availability of water becomes critical.

Except for municipal and industrial water systems, water supply planning is done by each county in the Kitsap Basin, which includes all of Kitsap County and portions of King, Pierce, and Mason counties. County comprehensive water and sewage plans indicated as early as 1969 the criticality of available water for future water supply.

KITSAP COUNTY

In Kitsap County there are municipal water supply systems at Bremerton, Port Orchard, Poulsbo, and Winslow. The county has, in addition, 16 water districts and hundreds of small public water supply systems.

Kitsap County's "Comprehensive Water and Sewage Plan (1970)" recommended that water could be provided in the county by special districts and municipalities through the year 1990 by expansion of existing systems. The plan divided Kitsap County into four sections: Bainbridge Island, and the north, central, and south sections of the county. Conclusions concerning the availability of additional water for domestic supply in each of those sections are summarized below:

Bainbridge Island

> It was concluded by the Kitsap County Comprehensive Plan that current (1970) water supply sources are not adequate to provide continued service for Bainbridge Island.

North Section

1. Existing sources within the majority of the north section of Kitsap County will be inadequate to provide for future needs to 1990.

2. Small local reservoirs and distribution systems will be required to serve the local areas prior to 1990.

The North Section contains the Navy facilities of the City of Bremerton, and Bangor which includes the Trident Nuclear Submarine Support Facility. The projected increased population related to the Trident project led to studies to identify additional water supply sources in that area.

In 1976, the USGS completed a report, "Availability of Ground Water in the Area Surrounding the Trident Submarine Construction Facility, Kitsap County, Washington," by A. J. Hansen, Jr. and Dee Molenaar. The Hansen-Molenaar report determined the "water budget" of the Trident impact area by balancing the amount of water entering the natural system in the form of precipitation against the amount of water leaving the system by evapotranspiration, surface runoff, streamflow and use of water by man.

From this analysis it was determined that wells drilled in the upper aquifer in the vicinity of Blackjack, Clear, and Dogfish creeks could yield an additional 2.32 cfs and that wells tapping the lower aquifer near Blackjack and Clear creeks near Gilbertson and Lemolo would yield an additional 5.41 cfs. These streams are located in the southeastern portion of the Trident impact study area.

More recent studies by the USGS, Navy hydrologists, and contracting consultants have indicated that the northern aquifer is not as extensive as was originally thought. Occurrence of the aquifer is interrupted, and wells drilled in the area often "miss" the aquifer.

In the first phase of construction of the Trident drydock facility as much as 4,000 gallons of water per minute (gpm) were being pumped from the underlying aquifer to keep the site dry. It was thought at that time the Trident related wells could provide 7,000 gpm for water supply, including the off-base north central portion of the Kitsap Peninsula.

More recently, refined studies and better measurements have indicated a total under flow through the aquifer of 2,000 to 2,500 gpm. It is expected that when the submarine base is fully operational, the source will have to provide at least 1500 gpm. In addition, off-base people are now tapping the same supply aquifer. This additional future demand will preclude availability of water from the Trident related wells to off-base water users.

A study of the water resources of the Port Madison Suquamish Indian Reservation, completed in 1979, indicates that use of surface water from streams or reservoirs during the study year 1975 was practically nonexistent.

The study concluded that there is enough ground water available within the reservation boundaries to supply (without greatly diminishing the amount in storage) about 5,000 people in the western part of the reservation (area around Suquamish) and 3,000 people in the eastern part of the reservation (area around Indianola). This is about 4 times the 1977 population of the reservation.

At present, the Suquamish tribe has no plans to develop surface water resources for domestic water supply. They do, however, have plans for salmon rearing programs on numerous streams in the area.

A study of the water resources of the Port Gamble Indian Reservation (Klallam Tribe) was completed in 1980 by the U.S. Geological Survey. The study determined that ground water in the area generally occurs in two aquifers: a shallow aquifer that usually yields only enough water to supply one or two households, and a lower artesian aquifer lying near or below sea level that produces up to 65 gpm. One well in the area taps a third aquifer lying 75-80 feet or more below sea level. It was concluded by the study that future supplies of ground water probably can be withdrawn from the lower artesian aquifer system almost anywhere beneath the reservation.

Three streams: Gamble Creek, Middle Creek, and Little Boston Creek were analyzed for stream flow characteristics. Because the estimated low flows of Middle Creek and Little Boston Creek for 20-year recurrence intervals are greater than the estimated economical ground water potential yield, the two streams are proposed for consideration, with treatment, as potential sources of domestic water.

The tribe operates a fish hatchery on Little Boston Creek. In a meeting between the Department of Ecology and the tribe's fisheries representatives, a decision was made to propose closure of the stream to additional diversions by Chapter 173-515 WAC. Gamble Creek is not on the reservation and is currently closed to diversion under procedures specified in Chapter 75.20 RCW.

Central Section:

1. The Kitsap County Comprehensive Water and Sewerage Plan concluded that the central section apparently has adequate supplies of ground water to provide for the needs of the local systems to 1990.

2. Productive aquifers occur in the Silverdale area and Manette Peninsula area.

3. The University of Washington and U.S. Fish and Wildlife Service have completed an exploratory aquifer testing program to determine if sufficient water resources are available to establish a regional interagency fisheries research center at the Big Beef Creek Fish Research Station. The exploratory program revealed several deep aquifers and a production well was developed and pump tested at 2,000 gpm or 2.2 cfs.

South Section

1. Much of the south section is sparsely populated and not anticipated to require development of water systems before 1990.

2. Existing storage facilities in the Port Orchard, Annapolis, and Manchester areas were found to be inadequate to meet the 1980 needs.

3. The comprehensive plan includes additional local storage facilities and distribution mains.

The Kitsap County Comprehensive Water and Sewerage Plan (1970), concluded that most of the readily accessible water supply resources will have been appropriated by the year 1990, and recommended seeking sources outside the basin (WRIA 15). The City of Bremerton has applied for water rights totaling 250 cfs on the Duckabush, Hamma Hamma, and Skokomish Rivers, located in Water Resource Inventory Area 16.

MASON COUNTY

The portion of Mason County located in the Kitsap Basin has one water district, eight community systems, two systems serving state facilities, and numerous small public water supply systems. Nearly all suppliers acquire water from ground water sources. Water Supply Bulletin No. 18 (Garling-Molenaar, 1965) projected that high quality ground water, with few possible exceptions, should be adequate to meet water requirements until 1990. The Mason County Comprehensive Water and Sewer Plan (1971) suggests the Dosewallips, Duckabush, Hamma Hamma rivers, and the south fork of the Skokomish River as potential future water supply sources. All are located outside the Kitsap Basin, in Water Resource Inventory Area 16. Although the Mason County Comprehensive Plan concluded that development of most of these sources for water supply would not be economically feasible, the Plan suggested that the south fork of the Skokomish River was the most ideally located to supply Mason County's longrange water needs, and recommended that if the City of Tacoma cancels its current water right application on this stream, Mason County should apply for at least 150 cfs to meet industrial and domestic needs through 2020.

PIERCE COUNTY

The portion of Pierce County located in the Kitsap Basin includes the Longbranch Peninsula, the Gig Harbor Peninsula, Fox Island, McNeil Island, Anderson Island, Ketron Island, and Herron Island.

Pierce County has a municipal system serving the Gig Harbor area, two water districts, four community systems, two systems serving state facilities, and numerous small water supply facilities. No stream waters are currently being used to supply major domestic water needs in this portion of the Kitsap Basin.

Pierce County's Comprehensive Water Supply Study and Plan (1969) predicted that the Gig Harbor Peninsula should be able to continue supplying their own needs with local ground water supplies until 1985. It was expected that beyond this date, additional demands would probably be supplied from Tacoma's water system by constructing a supply line across the Narrows Bridge. However, even that supply would require supplementation by the year 2000. At the present time, other areas within the Pierce County part of the Kitsap Basin will continue to be served by ground waters. The Comprehensive Plan suggested the ultimate solution to the area's future water supply needs would be diversion of water from the south fork of the Skokomish River to service the Gig Harbor Peninsula (Pierce County), Bremerton and Port Orchard (Kitsap County), and Vashon Island (King County).

KING COUNTY

Vashon Island is the King County portion of the Kitsap Basin. Vashon Island has one municipal water supply system at Burton, one water district, twelve community water systems, and several small public water supply systems.

On Vashon Island almost all domestic water is withdrawn from local ground water and springs along the slopes. Most of the islands water systems tap relatively shallow aquifers. These vary seasonally in quantity and are susceptible to pollution from septic tank effluent. Some wells on the island tap deeper aquifers which appear to have large quantities of water. Some concern has been expressed, however, that since these aquifers lie below sea level and are overlain by massive layers of impermeable clay, they may not be rechargeable. If this is true, heavy use of the water could cause marine salt water intrusion.

At the present time, very little is known about the location of the island's aquifers, or about the quantity and quality of water in them.

King County's draft Vashon Community Plan (1979) initiated policies to continue the use of ground water for future domestic water supplies and discouraged importing water for domestic uses from off the island. Future land uses and densities are to be planned so that demands on the island's rechargeable ground water resources do not exceed its capacity to provide adequate supplies.

WATER QUALITY

Kitsap County is the only county in the Kitsap Water Resource Inventory Area that maintains a routine monitoring program for surface water quality. Twenty-two lakes and eleven streams are sampled once every three months. A monitoring station on the Dewatto River in Mason County was maintained by the Department of Ecology until 1974. Other water quality information has been acquired sporadically. The 1975 Kitsap Basin Water Pollution Control and Abatement Plan indicated that the fresh surface waters in the basin generally meet the Department of Ecology classification standards for Class AA and Class A waters, with several exceptions:

Frequent violations of total coliform bacteria densities occur in the Dewatto River, Big Beef Creek, Blackjack Creek, Burley Creek, Chico Creek, Curley Creek, Minter Creek, Olalla Creek,

Salmonberry Creek, and the Union River (water supply source for the City of Bremerton). The Tahuya River and Anderson Creek (#96) indicate only occasional violations of coliform bacteria.

Gorst Creek, a unit of Bremerton's water supply system, has been restricted for water use by the Department of Social and Health Services because of a potential water quality problem that could result from pollution in the water shed.

Turbidity measurements consistently exceed 5 Jackson Turbidity Units (JTU) in Blackjack Creek, Burley Creek, Chico Creek, Curley Creek, Minter Creek, Olalla Creek, and Salmonberry Creek.

Other water quality parameters measured are within Class A standards for all streams.

While the Instream Resources Protection Program is not designed to improve the water quality of streams, establishment of flow levels will help to maintain a high level of water quality in streams by protecting given quantities of water for dilution and transport of pollutants.

CURRENT ADMINISTRATIVE STATUS

Of the 582 streams identified in the Kitsap Water Resource Inventory Area, 17 are currently under low flow limitations and 17 streams, including their tributaries, are closed to additional consumptive appropriations. Of the 182 lakes in the area, Mission Lake and Stansberry Lake are closed to diversions. All other streams and lakes are presently free of any surface water source limitations.

PROPOSED ADMINISTRATIVE STATUS

Because of the large number and small size of streams in the Kitsap Water Resource Inventory Area, only some of the major streams have long-term continuous hydrologic records and anadromous fish usage data. The streams proposed for action are those that have been documented as significant for fish and wildlife habitat by the Department of Fisheries (WDF) or the Department of Game (WDG) and Indian fishery management representatives, or those for which the Department of Ecology (WDOE) has determined that no water is available for additional consumptive appropriation. Streams have been separated into classes according to the data available for analyses. The types of action proposed for streams are as follows:

1. Streams currently closed pursuant to water right recommendations made in the past by WDF and WDG in accordance with chapter 75.20 RCW will be closed by administrative rule under the Instream Resources Protection Program.

2. Instream flows will be established for streams where:

    a) continuous records of flow are available
    b) flow correlation to streams with continuous records is possible
    c) estimated annual average flow is greater than 5 cfs and parametric analysis of flow frequency can be performed.

Where it has been determined that streams in Class 2 do not have water available for additional consumptive appropriation, full-year or partial-year closure is proposed.

3. For small streams with an estimated average flow of 5 cfs or less and a known high value for fish production, aesthetic, and other environmental values, the department has determined that the minimum flow will be the natural flow.

4. No action is proposed for the remaining streams in the Kitsap Basin (512 identified by Garling-Molenaar - 1965). Instream flows for these streams and any others will be considered on a case-by-case basis as water right applications are reviewed by the Department of Ecology and departments of Fisheries and Game. New closures and instream flows may be incorporated into the rules when they are periodically reviewed.

Lakes perennially tributary to closed streams are proposed for closure.

Ground water withdrawals will not be affected unless it is shown that such withdrawals would have significant adverse impacts on streams.

Table 1, pages 7-11 lists separately each stream proposed for action and indicates the type of action proposed for each stream. Appendix A contains the Proposed Administrative Rules. The following hydrographs will be used for definition of instream flows on those days not specifically identified in WAC 173-515-030(1).

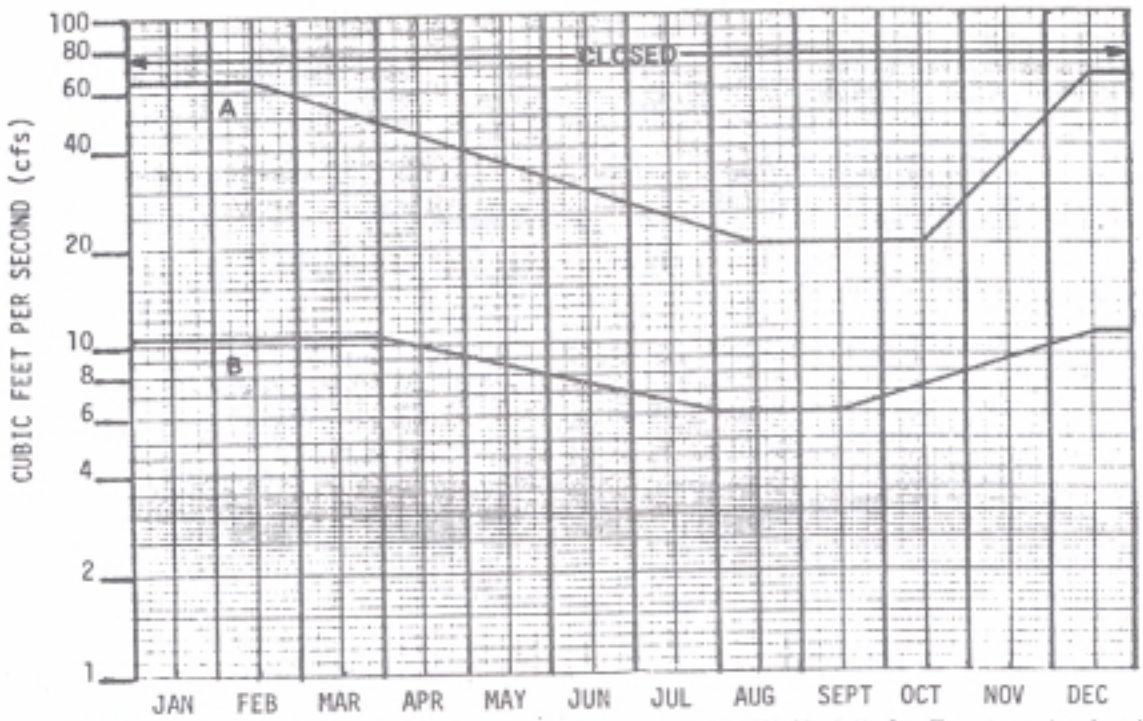


FIGURE 1. A - Instream flow, Union River (#7), at gage No. 12-0635.00, R.M. 2. The stream is closed year-round from the mouth to McKeona Falls, R.M. 6.7. B - Instream flow, Anderson Creek (#96) at R.M. 0.1 near mouth.

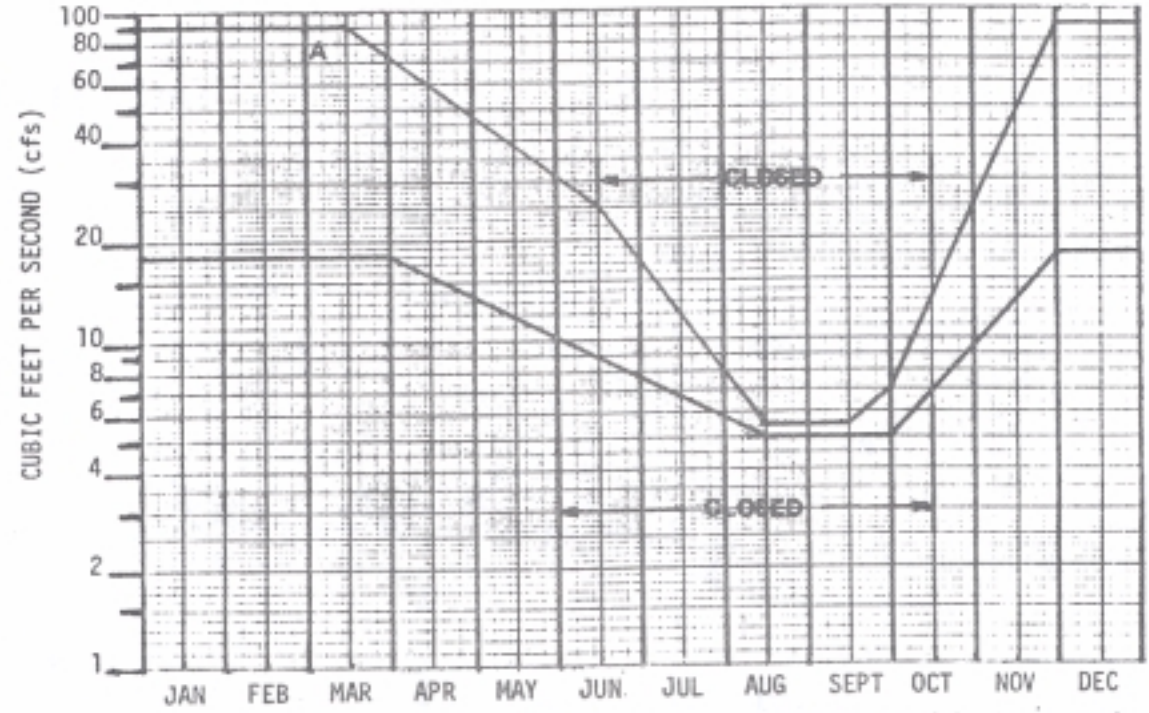


FIGURE 2. A - Instream flow, Yahuya River (#44), at gage No. 12-0680.00, R.M. 2.5. Closure is from June 15 to Oct. 15. B - Instream flow, Rendsland Creek (#60) near mouth. Closure is June 1 to October 15.

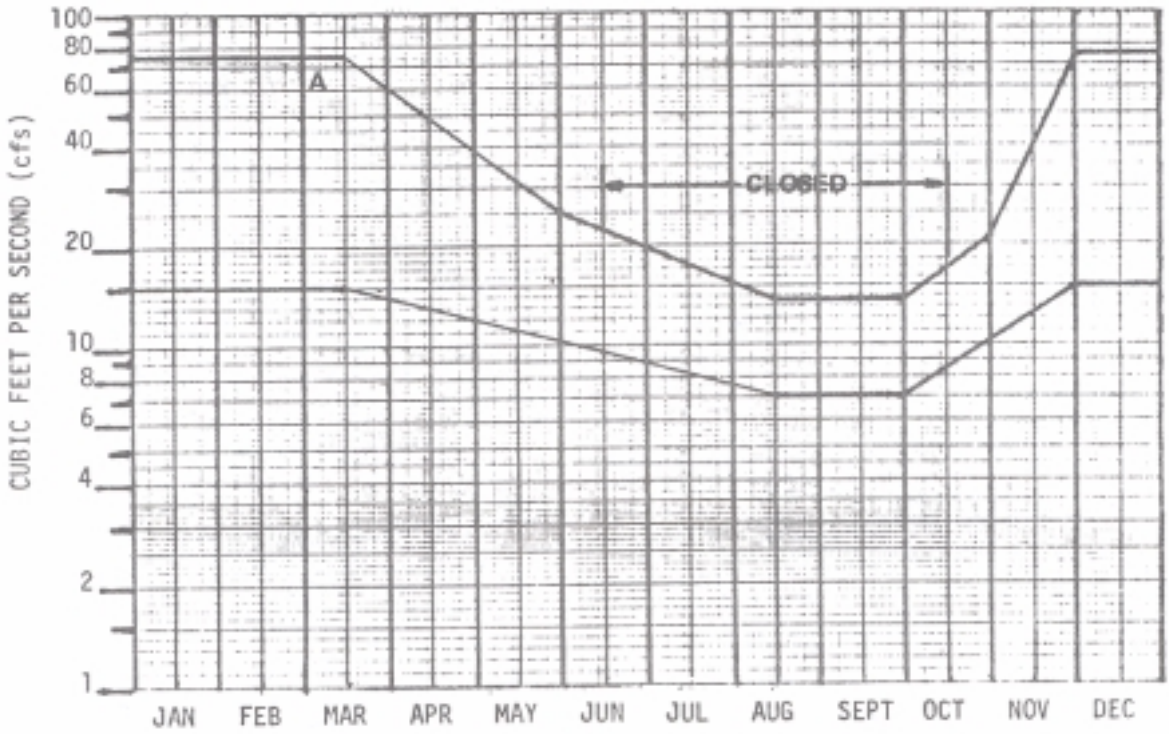


FIGURE 3. A - Instream flow, Dewatto River (#70), at gage No. 12-0685.00, R.M. 1.5. Closure is from June 15 to October 15. B - Instream flow, Stavis Creek (#113), at gage No. 12-0695.00, R.M. 0.75.

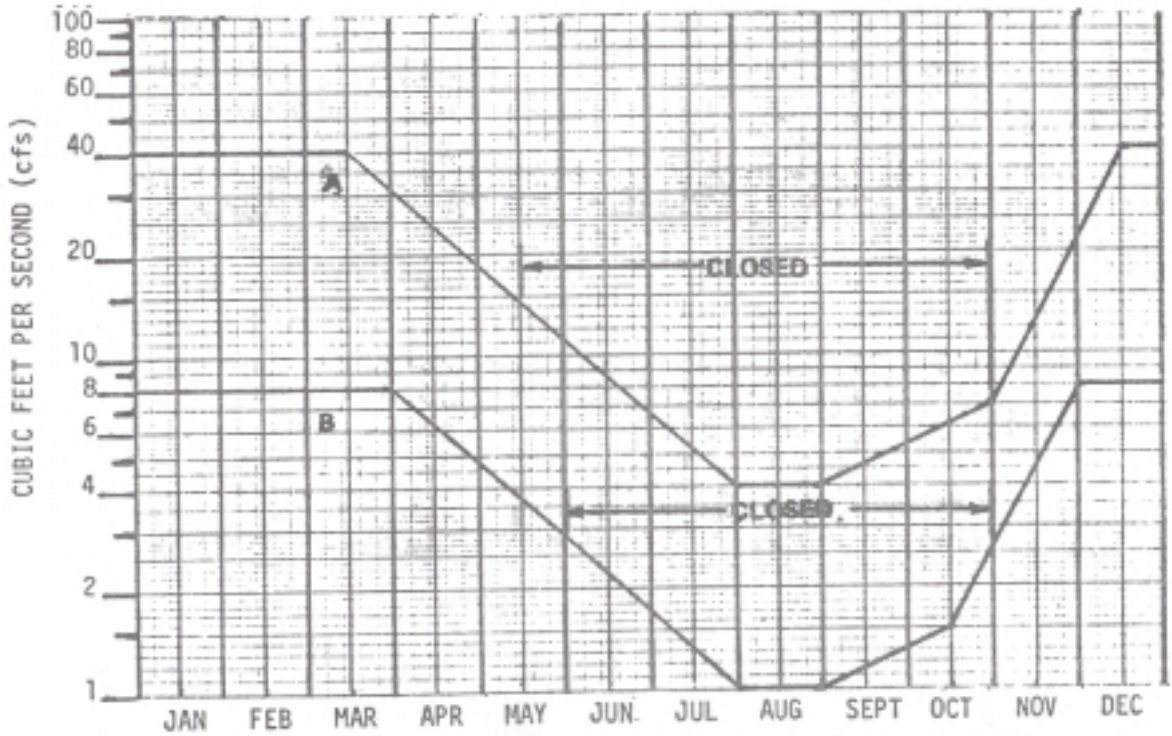


FIGURE 4. A - Instream flow, Big Beef Creek (#121), at gage No. 12-0695.50, R.M. 0.25. Closure is from May 15 to November 1. B - Instream flow, Anderson Creek (#124), near mouth. Closure is from June 1 to November 1.

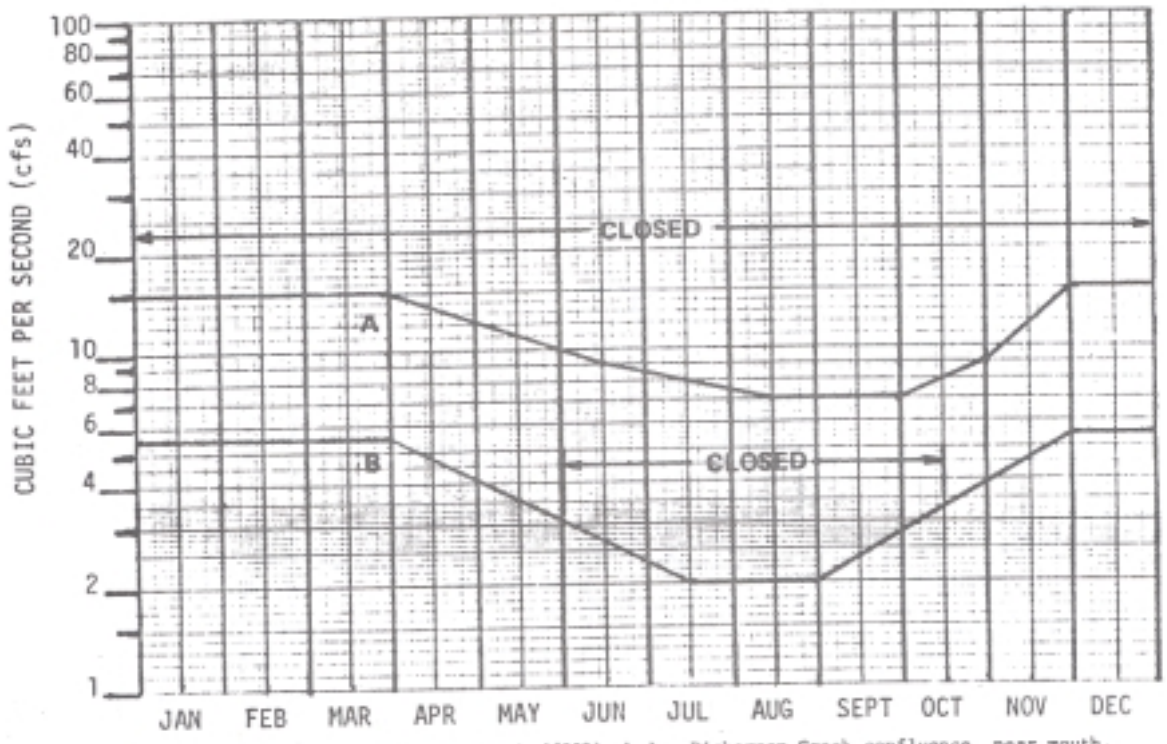


FIGURE 5. A - Instream flow, Chico Creek (#259), below Dickerson Creek confluence, near mouth. Closure is year-round. B - Instream flow, Grover's Creek (#192), near mouth. Closure is from June 1 to October 15.

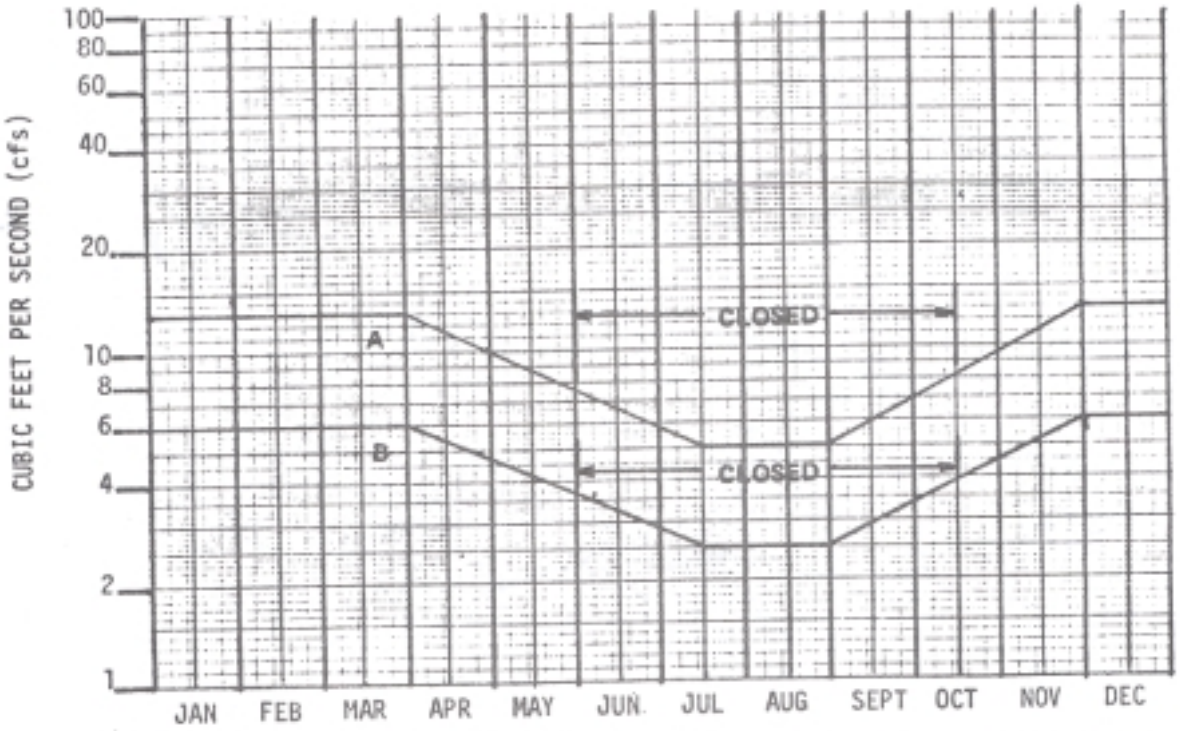


FIGURE 6. A - Instream flow, Olalla Creek (#313), near mouth. Closure is from June 1 to October 15.
B - Instream flow, Steel Creek (#223), near mouth. Closure is from June 1 to October 15.

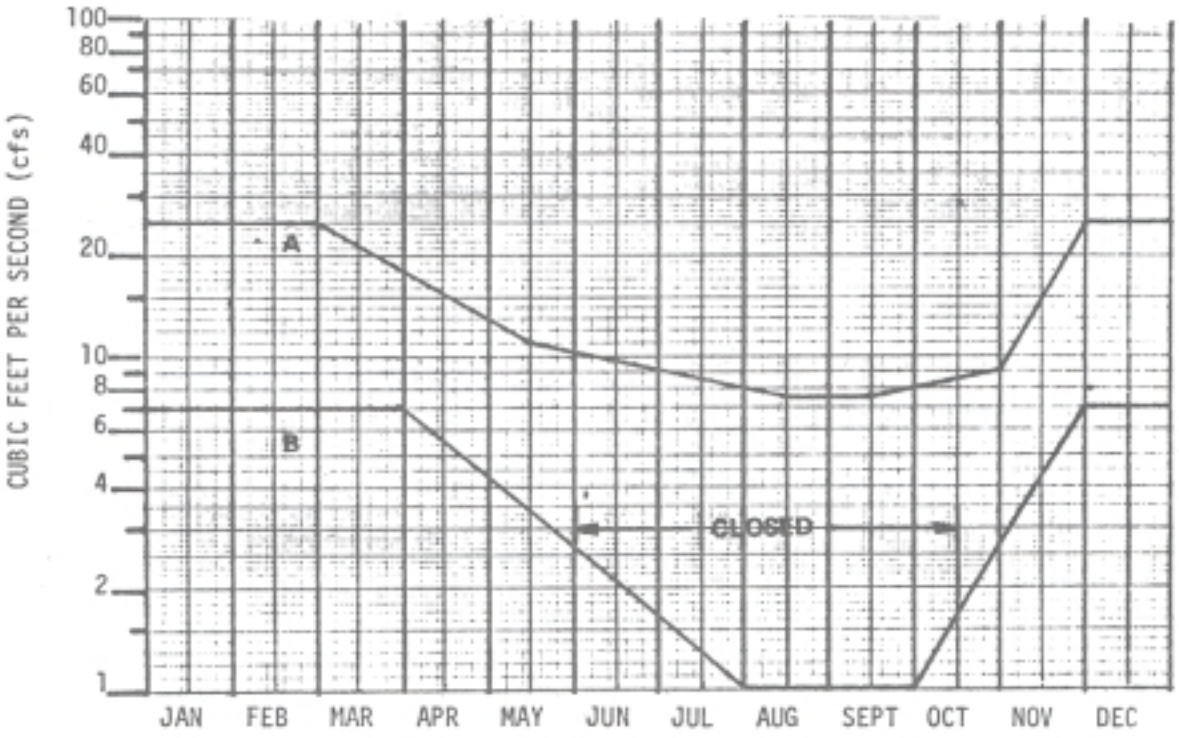


FIGURE 7. A - Instream flow, Gorst Creek (#268), at R.M. 0.1. B - Instream flow, Strawberry/ Koch's/Cooks (#248), near mouth. Closure is from June 1 to October 15.

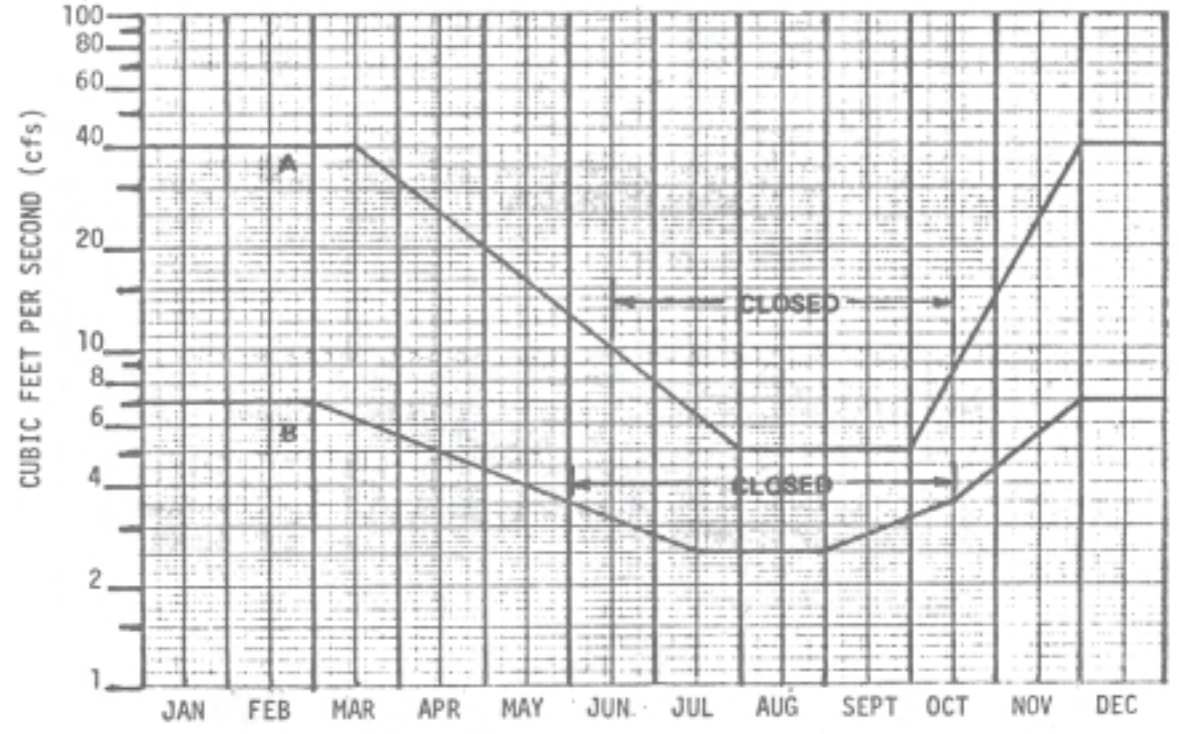


FIGURE 8. A - Instream flow, Curley Creek (#294), at R.M. 0.1. Closure is from June 15 to October 15. B - Instream flow, Purdy Creek (#354), at gage No. 12-0728.00, R.M. 0.1. Closure is from June 1 to October 15.

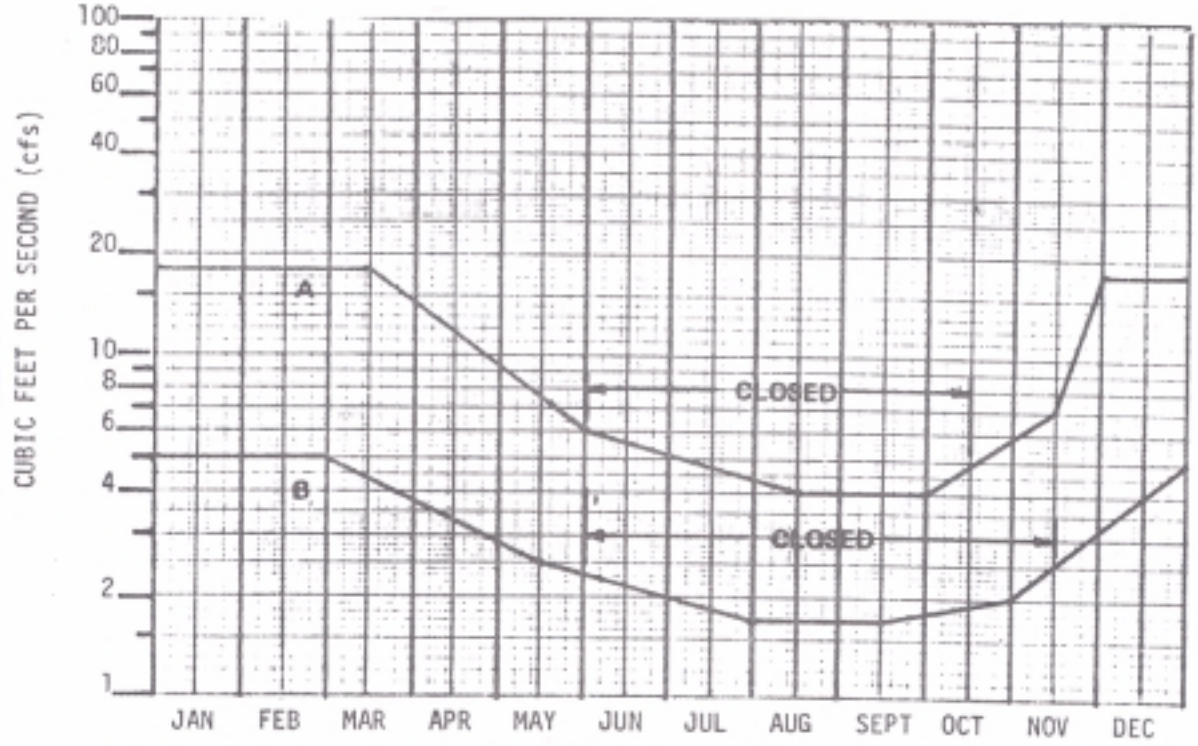


FIGURE 9. A - Instream flow, Rocky Creek (#415), at R.M. 0.1. Closure is from June 1 to October 15.
B - Instream flow, Lackey Creek (#369), near mouth. Closure is June 1 to November 15.

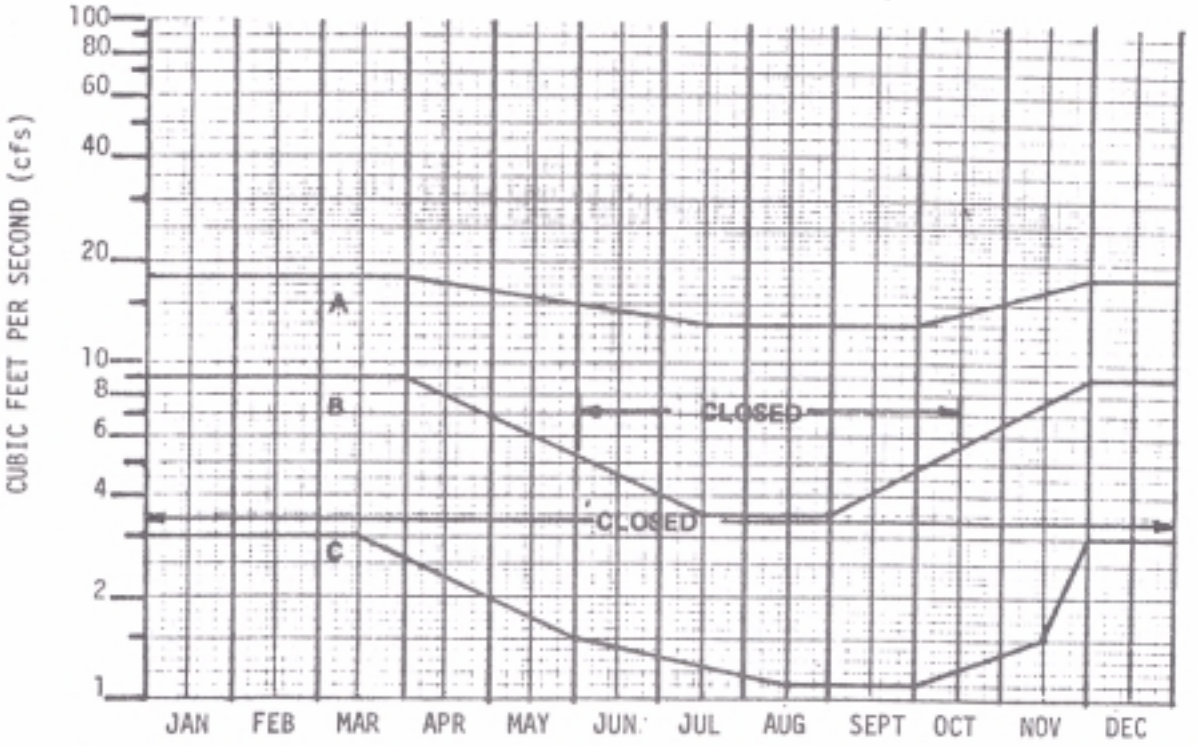


FIGURE 10. A - Instream flow, Coulter Creek (#425), at R.M. 0.1. B - Instream flow, Crescent Creek (#321), near mouth. Closure is from June 1 to October 15. C - Instream flow, Dickerson Creek, at confluence with Chico Creek. Closure is year-round.

DEFINITIONS

Acre-foot – a unit commonly used for measuring volumes of water used or stored; equal to the quantity of water required to cover one acre to a depth of one foot; also equal to 43,560 cubic feet or 325,851 gallons.

Administrative Status – the current status of low flow limitations or closure of a stream, administratively effected under the provision of RCW 75.20.050.

Appropriation – The application of surface or ground water to some beneficial use.

Aquifer – an underground layer of porous rock, sand, etc., that contains and transmits water.

Artesian aquifer – an aquifer in which the water is under sufficient pressure to cause it to rise above the zone of saturation without pumping when penetrated by a well.

Base Flow – (See instream flow).

CFS – cubic feet per second. A unit of measure for the rate of discharge of water. One cfs is the rate of flow of a cross sectional area of one square foot flowing at an average velocity of one foot per second. It is equal to 448.8 gallons per minute.

Closure – administrative measure to keep water resources from further appropriation for consumptive uses. Generally, domestic household use and normal stock watering are exempted from closure when there is no practicable alternate source of supply.

Coliform Bacteria – any of a number of organisms common to the intestinal tract of man and animals, whose presence in water is an indicator of pollution.

Confluence – the point at which one stream flows into another; or, where two streams converge and unite.

Continuous Record of Flow – (see long-term hydrologic data).

Critical Period Flows – an instream flow that may be set by the department at a level below the normal year flow, to be applicable during drought or low runoff periods on streams where storage or water supply facilities are proposed.

Department – the Washington State Department of Ecology (WDOE).

Discharge Duration Hydrograph – a graphic illustration indicating the percentage of time that specified discharges are equaled or exceeded at a particular time of the year.

Diversion - (1) the act of taking water from a stream or other body of water into a canal, pipe, or other conduit, (2) a man-made structure for taking water from a stream or other body of water.

Escapement - adult anadromous fish that "escape" fishing gear to migrate upstream to spawning grounds.

Flow Correlation - the mathematical process of establishing a relation between short-term gaging station records on one stream and one or more long-term gaging station records on another stream.

Flow Frequency - percentage of time a stream flow is equaled or exceeded during a given period.

GPM - gallons per minute.

Ground Water Effluent - subsurface flow of ground water into a stream or other surface water body.

Hydraulic Continuity - uninterrupted flow of water between an underground source and a surface water body.

Impermeable Strata or Unit - a layer or unit of material through which water cannot pass.

Instream Flow - flows necessary to provide for the preservation of wildlife, fish, scenic, aesthetic, and other environmental values, navigational and recreational values.

Interbasin Ground Water Transfer - the underground exchange of water from one river basin to another.

Kitsap I.R.P.P. - Kitsap Instream Resources Protection Program.

Long-term Hydrologic Data - stream gage information recorded continuously over a long period.

Low Flow Limitation - (see surface water source limitation).

Minimum Flow - (see instream flow).

Miscellaneous Flow Data - instream flow information measured intermittently at selected points.

Natural flow - the rate of water movement past a specified point on a natural stream from a drainage area for which there have been no effects caused by stream diversion, storage, import, export, return flow, or change in consumptive use caused by man-controlled modifications to land use.

Natural Storage - water naturally detained in a drainage basin, such as ground water, channel storage, and depression storage.

Optimum Flow Conditions – refers to most desirable flows for anadromous fish propagation.

Parametric Analysis – process used to correlate a stream with little or no flow data to another stream with similar precipitation characteristics and a predetermined base flow in order to develop flow duration curves.

Partial-year closure – closure of a stream effective during low flow periods.

Runoff – that part of total water yield that appears in streams.

Satellite Station – a stream or other surface water body utilized for rearing of anadromous fish hatched at another site.

Sea Water Intrusion – intrusion of sea water into a shoreline well or aquifer as a result of a decrease in fresh water pressure when water is withdrawn from that source.

Shallow Aquifer – simplified term used in the Kitsap Instream Resources Protection Program document to refer to any aquifer lying at a depth shallow enough that direct hydraulic continuity with a surface water body could exist. The aquifers may or may not be overlain by a confining strata or unit such as hard pan, clay, etc.

Significant Hydraulic Continuity – refers to impacts on stream flow from ground water withdrawals where the ground water system is continuous with a surface water body. Hydraulic continuity is defined by WDOE as being significant if (1) a well is located closer to a stream than a distance of half a foot for each gallon per minute of maximum pumping rate and there is no impervious material separating the well from the stream, or (2) if the draw from the stream or interception of recharge to the stream caused by a well or well field is more than a five percent calculated reduction in the applicable instream flow (normal year) during the period of stream closure or flow limitation.

Surface Water Source Limitation – existing low flows and closures administratively applied under the authority of RCW 75.20.050.

WRIA – Water Resources Inventory Area.

BIBLIOGRAPHY

Revised Code of Washington:

Chapter 75.20	Fisheries Code
Chapter 90.03	1917 Water Code
Chapter 90.22	Minimum Water Flows and Levels
Chapter 90.44	Regulation of Public Ground Waters
Chapter 90.54	Water Resources Act of 1971

Washington Administrative Code:

Chapter 173-500	Water Resources Management Program Established Pursuant to the Water Resources Act of 1971.

Boise Cascade Properties, Inc. 1970. Nettleton Lakes on the Canal. Dewatto River Fisheries Improvement Plan 620-272. Prepared by Milo C. Bell, Fisheries Consultant and Harstad Associates, Inc. Seattle, WA.

Boise Cascade Properties, Inc. 1970. Nettleton Lakes on the Canal. Water System Comprehensive Plan. Prepared by Harstad Associates, Inc. Seattle, WA.

Central Puget Sound Economic Development District. 1975. Analysis of Selected Impacts of Trident-Related Population Growth in Kitsap County. Prepared by Arthur D. Little, Inc. San Francisco.

City of Bremerton. 1969. A Water Supply Study for the City of Bremerton, Hamma Hamma River, Tahuya River and Mission Creek. Prepared by Kramer, Chin, & Mayo, Inc. Seattle, WA.

City of Bremerton, Department of Public Works. 1976. Comprehensive Water Supply Plan. Kitsap County, WA.

City of Tacoma, Department of Public Utilities, Water Division. 1969. A Comprehensive Water Supply Study and Plan for Pierce County and Vicinity. Tacoma, WA.

City of Tacoma, Department of Public Utilities. 1970. Planning Tacoma's Water Needs 1970-2000. Tacoma, WA.

Deeter, Jerald D. 1979. Quaternary Geology and Stratigraphy of Kitsap County, Washington. Master's Thesis, Western Washington University, Bellingham, WA.

Department of Conservation, Division of Water Resources. 1965. Water Supply Bulletin No. 18, Water Resources and Geology of the Kitsap Peninsula and Certain Adjacent Islands (including Plates 1 through 5). Prepared by M. E. Garling, Dee Molenaar and others with contributions by the U.S. Geological Survey. Olympia, WA.

Department of Ecology. 1975. WRIA 15 – Kitsap Basin 303(e) Water Quality Management Plan. Prepared by Pace Corporation.

Department of Ecology and Kitsap County. 1975. WRIA 15 – Kitsap Basin. Water Pollution and Abatement Plan. Prepared by Pace Corporation.

Department of Fisheries. 1975. A catalog of Washington Streams and Salmon Utilization, Vol. 1, Puget Sound.

Department of the Navy. 1974. Trident Support Site, Bangor, Washington. Final Environmental Impact Statement, July, 1974. Bremerton, WA.

Department of the Navy. 1977. Naval Submarine Base, Bangor, Washington. Supplement to Final Environmental Impact Statement, February 1977.

Department of Social and Health Services, Water Supply and Waste Section. 1979. Preliminary Assessment of Bainbridge Island Water Supply Issues. Prepared by request of the Board of Kitsap County Commissioners.

King County. 1964. Comprehensive Plan for Flood Control. Prepared by Bertram P. Thomas, Consulting Engineer. Washington.

King County, Division of Planning. 1978. Vashon Community Plan Profile. Seattle, WA.

King County. 1976. Policy Options: Surface Water Management, Interim Report King County Surface Water Task Force. Washington.

Kitsap County. 1969. Comprehensive Plan North Kitsap Study Area and Poulsbo. Prepared by Harstad Associates, Inc. Seattle, WA.

Kitsap County. 1970. Comprehensive Water and Sewerage Plans for Kitsap County. Prepared by Hill, Ingman, Chase & Co. Seattle, WA.

Kitsap County, Department of Community Development. 1977. Kitsap County Comprehensive Plan. Vol. I, Goals and Policies; design criteria. Washington.

Kitsap Subregional Council, Puget Sound Council of Governments. 1979. Issue Paper on Water Supply in the Kitsap County-wide Area. Seattle, WA

Klallam Indian Tribe. 1974. Port Gamble Comprehensive Plan, Section 2: The Plan. Prepared by Stevens, Thompson o& Runyan, Inc., Seattle, WA.

Mason County. 1971. Comprehensive Water and Sewer Plan and Water Pollution Control and Abatement Plan (Sewage Drainage Basins 14 and 16). Prepared by R. W. Beck and Associates. Seattle, WA.

Pierce County, Department of Public Utilities, Water Division. 1969. A Comprehensive Water Supply Study and Plan for Pierce County and Vicinity.

Puget Sound Task Force - Pacific Northwest River Basins Commission. 1970. Puget Sound and Adjacent Waters, Appendix III, Hydrology and Natural Environment.

Suquamish Indian Tribe. 1974. Port Madison Comprehensive Plan, Section 2: The Plan. Prepared by Stevens, Thompson and Runyan, Inc. Seattle, WA.

U.S. Geological Survey. 1976. Availability of Ground Water in the Area Surrounding the Trident Submarine Construction Facility, Kitsap County, Washington. Prepared in cooperation with State of Washington Department of Ecology. Tacoma, WA.

U.S. Geological Survey. 1977. Low Flow Characteristics of Streams on the Kitsap Peninsula and Selected Adjacent Islands, Washington. By J. E. Cummans. Tacoma, WA.

U.S. Geological Survey. 1977. Municipal, Industrial, and Irrigation Water Use in Washington, 1975. Open-File Report 77-308. Prepared in cooperation with Washington State Department of Ecology.

U.S. Geological Survey. 1979. Water Resources of the Port Madison Indian Reservation, Washington. Prepared in cooperation with Suquamish Tribal Council. Tacoma, WA.

U.S. Geological Survey. 1980. Ground Water Availability in the Kitsap Peninsula. Prepared in cooperation with the Kitsap County Department of Community Development, and the State of Washington Department of Ecology. Tacoma, WA.

DISTRIBUTION LIST

Federal Agencies

National Marine Fisheries Service
U.S. Fish and Wildlife Service
U.S. Geological Survey
U.S. Environmental Protection Agency, Region X
U.S. Soil Conservation Service

State Agencies

Washington National Heritage Program
Washington State Ecological Commission
Department of Natural Resources
Department of Social and Health Services
Department of Game
Department of Fisheries
Department of Agriculture
Department of Commerce and Economic Development
Planning and Community Affairs Agency
Office of Financial Management
Parks and Recreation Commission
Interagency Commission for Outdoor Recreation
Department of Transportation
Association of Washington Counties
Association of Washington Cities
Washington Association of Water Districts

Regional Agencies

Pacific Northwest River Basins Commission
Puget Sound Council of Governments

Kitsap County Agencies

Kitsap County Commissioners
Department of Community Development Planning Division
Kitsap County Health Department Environmental Health
Kitsap County Parks Department

King County Agencies

Department of Budget and Program Development
Department of Planning and Community Development
King County Subregional Council

Pierce County Agencies

Pierce County Planning Department
Pierce County Public Works Department
Pierce County Health Department Division of Environmental Health
Pierce County Parks and Recreation
Pierce County Commissioners

Mason County Agencies

Mason County Commissioners
Mason County Parks and Recreation
Mason County Regional Planning Council
Mason County Health Department Division of Environmental Health

Cities

City of Bremerton
City of Port Orchard
Town of Winslow
Town of Silverdale (unincorporated)
Town of Poulsbo
Town of Kingston (unincorporated)
Town of Gig Harbor
Association of Washington Cities

Indian Tribes

Suquamish Indian Tribe
Squaxin Island Tribe
Skokomish Tribe
Port Gamble Klallam Tribe

Organizations

Friends of the Earth
League of Women Voters
Audubon Society
Pacific Northwest Waterways Association
Washington State Commercial Passenger Fishing Vessel Association
Nature Conservancy
Steel-head Trout Club of Washington
Washington State Sportsmen's Council
Purse Seine Vessel Owners Association
Washington Kayak Club
Citizens for Clean Water

Libraries and Universities

Kitsap Central Library
Pierce County Library
Tacoma Public Library
King County Library System
Shelton Public Library
University of Washington, SEPA Information Center
University of Washington, Fisheries Research Institute

WRIA 15 Water Suppliers

Letters of invitation to attend a formal briefing on the Kitsap Basin Instream Resources Protection Program were sent to the following water suppliers in the Kitsap Basin. Draft documents have been distributed to those who attended the briefing.

King County Department of Public Works
Pierce County Department of Public Works
Mason County Engineers
Mason County Department of Public Works
Kitsap County Public Works Department
City of Bremerton
City of Port Orchard
City of Poulsbo
City of Winslow
Kitsap County PUD No. 1
Port Gamble Indian Reservation Water System
Port Gamble Water System
Gig Harbor
Annapolis Water District
Bainbridge Island Water District
Chico Water District
Crystal Springs Water District
Eldorado Water District
Gaffner Tracts Water District
Hansville Water District
Jensen Water District
Kingston Water District
Kitsap County Water District
Manchester Water District
North Perry Avenue Water District
Old Bangor Water District:
Phinney Bay Water District
Sunnyslope Water District
Tracyton Water District
Belfair Water District No. 1
Water District No. 19
Alpenwood & Alpinwood Water System
Anderson Island Water Supply
Apex Airport Water System
Aqua Vista Water Supply
Artondale Water System
Bethel Water System
Burley Water Association
Bethel East
Beulah Park Water System
Bill Point Water
Burton Water Co-op
C. & T. Development Corporation
Cedar Glen Mobile Home Park
Cherokee Strip Water Co.
Clear Creek Mobile Home Park
Cliffside Development Co.
Clifton Beach Tracts Co-op
Clifton Pebble Beach Water
Cole Point .Heights Water Supply
Collins Lake Community Club
County Services Inc. System
Cove Resort
Cromwell Water
Crystal Springs
Dawn Park Water Co. Inc.
Dawn Park Water Co. Inc.

Deseret Park Water Supply
Dilworth Point Community Water System
Driftwood Cove Water Corp.
Dunbar Cove
Emerald Heights
Erland Point Water Co. Inc.
Ferncliff Water Association Inc.
Fox Island Mutual Water Association
Frog Pond Waters, Inc.
Gladstone Estates Water System
Gala Pines Water
Gold Beach Water Association
Goldens Mobile Home Park
Harbor Water Co.
Harborland Mobile Court
Heights Water Corporation
Hillcrest Mobile Home Park
Horseshoe Lake Estates
Inwood Estates
Island Lake Bible Camp Inc.
Dale Kooley
L & L Water
Lake of the Woods Water Supply
Long Lake View Estates #1
Lynch Cove Community System
Lynnwood Community Beach Association
Lynnwood Center Water Supply
Marine Estates Water System
Maury Mutual Water Co.
McIntyre-Galford Water System
Meadowmere
Miami Beach Water System
Minter Beach Estates
Minter Brook Ranchettes Water
Mission Creek Tract
Moorland Water Corporation
Mountain Water Co.
North Bainbridge Water Co.
North Vashon Water Co.
Northwood
Olympic Mall Water System
Olympic Sunset West
Olympic Terrace
Olympic View Mobile Home
Palmer Lake Water Co.
Paradise Cove
Parkdale Subdivision
Peninsula Park
Pinecrest
Pioneer Hills West
Pleasant Cove Water Association
Port Madison Water Co.
Priddy Vista
Prospect Point
Purdy Acres Water System
Raft Island Water Co.
Rebecca Shore Apts.
Rhododendron Heights Water System
Rhododendron Mobile Home
Riverhill Water System
Robinhood Terrace System
Royalwood
Rushmore Water System
Sandy Beach Ranches Water System
Sandy Shores Water Supply
Seavue Estates
Shore Acres Water Co.
Shorewood Beach Water Co.
Sound Country Living
South Bainbridge Water Co.
Stavis Creek
Strohs Water Co.
Sunny Cove Water
Sunnyview Terrace Association
Sunset Beach Water System
Sunset Hills
Surfrest Water System
Tahuya River Valley Community C.
Tahuya Lake Community Club
U.S. Naval Undersea Warfare
Vashon Island Water & Road
Vera Vista Apt. Water Supply
Viewside Community Water System I
View Estates
Wautanga Beach Community Water Co.
Weatherswood Vista Water
West Anchor Park
West Wynd
Westbridge Water Co.
Westside Water Co.
Wollochet Yacht Harbor Club
Wollochet Heights Estates
Woodies Tag-A-Long Mobile
Woadmere
Woodshore Apt.
Public Utility District of Kitsap Co.
G.E. Nedervold

APPENDIX A

PROPOSED ADMINISTRATIVE RULES

WASHINGTON STATE DEPARTMENT OF ECOLOGY

INSTREAM RESOURCES PROTECTION PROGRAM--KITSAP WATER RESOURCE INVENTORY AREA (WRIA) 15

Chapter 173-515 WAC

Authorities:

Water Resources Act of 1971
Chapter 90.54 RCW

Minimum Water Flows and Levels
Chapter 90.22 RCW

Water Resources Management Program
Chapter 173500 WAC

Fisheries Code
Chapter 75.20 RCW

Chapter 173-515 WAC

INSTREAM RESOURCES PROTECTION PROGRAM--KITSAP
WATER RESOURCE INVENTORY AREA (WRIA) 15

NEW SECTION

WAC 173-515-010 GENERAL PROVISION. These rules apply to waters within the Kitsap Water Resource Inventory Area (WRIA) 15 as defined in WAC 173-500-040. This chapter is promulgated pursuant to chapter 90.54 RCW (Water Resources Act of 1971), chapter 90.22 RCW (Minimum Water Flows and Levels), and in accordance with chapter 173-500 WAC (Water Resources Management Program).

NEW SECTION

WAC 173-515-020 PURPOSE. The purpose of this chapter is to retain perennial rivers, streams, and lakes in the Kitsap Water Resource Inventory Area (WRIA) 15 with instream flows and levels necessary to provide for preservation and protection of wildlife, fish, scenic, aesthetic and other environmental values, recreational and navigational values, and to preserve water quality.

NEW SECTION

WAC 173-515-030 ESTABLISHMENT OF INSTREAM FLOWS. (1) The following instream flows ere established for each stream listed, from the point of influence of mean high tide at low flow to the stream's headwaters including tributaries except where indicated otherwise. Monitoring will take place at the control locations indicated.

INSTREAM FLOWS IN THE KITSAP WATER RESOURCE
INVENTORY AREA (WRIA) 15

*WAC 173-515-040(2) closes certain streams to additional consumptive appropriations during specific time periods. These closures are indicated by asterisks in the following table. Such closures supersede the indicated instream flow. The Union River closure extends upstream to McKenna Falls (RM 6.7).

**Stream numbers correlate with Plate I, Instream Resources Protection Program, Kitsap Water Resource Inventory Area (WRIA) 15.

Stream Number**		#7	#44	#60
Stream Name		Union River	Tahuya River	Rendsland Cr.
Gage Number		12-0635.00	12-06$0.00	
River Mile		2	2.5	near mouth
Sec., Twp., Rge.		20,23N.,1W.	1.2,22N.,3W. 1	9,22N.,3W.
Month	Day	cfs	cfs	cfs
Jan.	1	65*	90	18
	15	65*	90	18

Stream Number**		#7	#44	#60
Stream Name		Union River	Tahuya River	Rendsland Cr.
Gage Number		12-0635.00	12-0680.00	
River Mile		2	2.5	near mouth
Sec., Twp., Rge.		20,23N.,1W.	12,22N.,3W.	19,22N.,3W.
Month	Day	cfs	cfs	cfs
Feb.	1	65*	90	18
	15	65*	90	18
Mar.	1	59*	90	18
	15	53*	90	18
Apr.	1	48*	72	18
	15	44*	58	16
May	1	40*	47	13.5
	15	36*	38	12
June	1	33*	31	10*
	15	29*	25*	9*
July	1	27*	18*	8*
	15	24*	12*	7*
Aug.	1	22*	8.5*	6*
	15	20*	5.5*	5*
Sept.	1	20*	5.5*	5*
	15	20*	5.5*	5*
Oct.	1	20*	7*	5*
	15	20*	13*	7*
Nov.	1	27*	25	9.5
	15	35*	48	13
Dec.	1	47*	90	18
	15	65*	90	18

Stream Number**		#70	#96	#113
Stream Name		Dewatto River	Anderson Cr.	Stavis Cr.
Gage Number		12-0685.00		12-0695.00
River Mile		1.5	0.1	0.75
Sec., Twp., Rge.		23,23N.,3W.	17,24N.,2W.	25,25N.,2W.
Month	Day	cfs	cfs	cfs
Jan.	1	75	10.5	15
	15	75	10.5	15
Feb.	1	75	10.5	15
	15	75	10.5	15
Mar.	1	75	10.5	15
	15	75	10.5	15
Apr.	1	60	10.5	14
	15	49	10	13
May	1	39	9	12
	15	32	8.5	11
June	1	25	8	10
	15	22*	7.5	9.5
July	1	20*	7	9
	15	17.5*	6.5	8

Stream Number**		#70	#96	#113
Stream Name		Dewatto River	Anderson Cr.	Stavis Cr.
Gage Number		12-0635.00		12-0695.00
River Mile		1.5	0.1	0.75
Sec., Twp., Rge.		27,23N.,3W.	17,24N.,2W..	25,25N.,2W.
Month	Day	cfs	cfs	cfs
Aug.	1	15.5*	6	7.5
	15	13.5*	6	7
Sept.	1	13.5*	6	7
	15	13.5*	6	7
Oct.	1	13.5*	6.5	7
	15	17*	7	8.5
Nov.	1	21	8	10.5
	15	39	8.5	12.5
Dec.	1	75	9.5	15
	15	75	10.5	15

Stream Number**		#121	#124	#192
Stream Name		Big Beef	Anderson Cr.	Grover's Cr.
Gage Number		12-0695.50		
River Mile		0.25	near mouth	near mouth
Sec., Twp., Rge.		22,25N.,1W.	13,25N.,1W.	4,26N.,2E..
Month	Day	cfs	cfs	cfs
Jan.	1	40	8	5.5
	15	40	8	5.5
Feb.	1	40	8	5.5
	15	40	8	5.5
Mar.	1	40	8	5.5
	15	40	8	5.5
Apr.	1	31	8	5.5
	15	24	6	4.5
May	1	18	4.5	4
	15	14*	3.5	3.5
June	1	11*	3*	3*
	15	8.5*	2*	2.5*
July	1	6.5*	1.5*	2.5*
	15	5*	1.5*	2*
Aug.	1	4*	1*	2*
	15	4*	1*	2*
Sept.	1	4*	1*	2*
	15	4.5*	1*	2.5*
Oct.	1	5.5*	1.5*	3*
	15	6*	1.5*	3.5*
Nov.	1	7*	2.5*	4
	15	12	4.5	4.5
Dec.	1	22	8	5.5
	15	40	8	5.5

Stream Number**		#223	#248	#259
Stream Name		Steel Creek	Strawberry/ Kochs/Cooks	Dickerson Cr.
Gage Number		near mouth	Creek	Confluence
River Mile			near mouth	with Chico Cr.
Sec., Twp., Rge.		14,25N.,1E.	20,25N.,1E.	8,24N.,1E.
Month	Day	cfs	cfs	cfs
Jan.	1	6	7	3*
	15	6	7	3*
Feb.	1	6	7	3*
	15	6	7	3*
Mar.	1	6	7	3*
	15	6	7	3*
Apr.	1	6	7	2.5*
	15	5	5.5	2.5*
May	1	4.5	4.5	2*
	15	4	3.5	2*
June	1	3.5*	2.5*	1.5*
	15	3*	2*	1.5*
July	1	3*	1.5*	1.5*
	15	2.5*	1.5*	1.5*
Aug.	1	2.5*	1*	1*
	15	2.5*	1*	1*
Sept.	1	2.5*	1*	1*
	15	3*	1*	1*
Oct.	1	3.5*	1*	1*
	15	4*	1.5*	1.5*
Nov.	1	4.5	2.5	1.5*
	15	5	4	1.5*
Dec.	1	6	7	3*
	15	6	7	3*

Stream Number**		#259	#268	#294
Stream Name		Chico Cr.	Gorst Cr.	Curley Cr.
Gage Number				
River Mile		near mouth	0.1	0.1
Sec., Twp., Rge.		5,24N.,1E.	32,24N.,1E.	4,23N.,2E.
Month	Day	cfs	cfs	cfs
Jan.	1	15*	25	40
	15	15*	25	40
Feb.	1	15*	25	40
	15	15*	25	40
Mar.	1	15*	25	40
	15	15*	25	40
Apr.	1	15*	18	31
	15	13.5*	15	25
May	1	12*	13	20
	15	11*	11	16

Stream Number**		#259	#268	#294
Stream Name		Chico Cr.	Gorst Cr.	Curley Cr.
Gage Number				
River Mile		near mouth	0.1	0.1
Sec., Twp., Rge.		5,24N.,1E.	32,24N.,1E.	4,23N.,2E.
Month	Day	cfs	cfs	cfs
June	1	10*	10.5	12.5
	15	9*	10	10*
July	1	8.5*	9	8*
	15	8*	8.5	6.5*
Aug.	1	7.5*	8	5*
	15	7*	7.5	5*
Sept.	1	7*	7.5	5*
	15	7*	7.5	5*
Oct.	1	7*	8	5*
	15	8*	8.5	8*
Nov.	1	9*	9	14
	15	11.5*	15	23
Dec.	1	15*	25	40
	15	15*	25	40

Stream Number**		#313	#321	#354
Stream Name		Ollala Cr.	Crescent Cr.	Purdy Cr.
Gage Number				12-0728.00
River Mile		near mouth	near mouth	0.1
Sec., Twp., Rge.		4,22N.,2E	32,22N.,2E.	24,22N.,1E.
Month	Day	cfs	cfs	cfs
Jan.	1	13	9	7
	15	13	9	7
Feb.	1	13	9	7
	15	13	9	7
Mar.	1	13	9	7
	15	13	9	6
Apr.	1	13	9	5.5
	15	11	7.5	5
May	1	9.5	7	4.5
	15	8.5	6	4
June	1	7.5*	5*	3.5*
	15	6.5*	4.5*	3*
July	1	5.5*	4*	3*
	15	5*	3.5*	2.5*
Aug.	1	5*	3.5*	2.5*
	15	5*	3.5*	2.5*
Sept.	1	5*	3.5*	2.5*
	15	6*	4*	3*
Oct.	1	7*	5*	3*
	15	8*	5.5*	3.5*

Stream Number**		#313	#321	#354
Stream Name		Ollala Cr.	Crescent Cr.	Purdy Cr.
Gage Number				12-0728.00
River Mile		near mouth	near mouth	0.1
Sec., Twp., Rge.		4,22N.,2E	5,21N.,2E.	24,22N.,1E.
Month	Day	cfs	cfs	cfs
Nov.	1	9	6.5	4.5
	15	11	7.5	5.5
Dec.	1	13	9	7
	15	13	9	7

Stream Number**		#369	#415	#425
Stream Name		Lackey Cr.	Rocky Cr.	Coulter Cr. a/
Gage Number				
River Mile		near mouth	0.1	0.1
Sec., Twp., Rge.		31,21N.,1E.	27,22N.,1W	9,22N.,1W.
Month	Day	cfs	cfs	cfs
Jan.	1	5	18	18
	15	5	18	18
Feb.	1	5	18	18
	15	5	18	18
Mar.	1	5	18	18
	15	4.5	18	18
Apr.	1	4	14.5	18
	15	3.5	11.5	17
May	1	3	9	16.5
	15	2.5	7.5	15.5
June	1	2.5*	6*	15
	15	2*	5.5*	14.5
July	1	2*	5*	13.5
	15	2*	4.5*	13
Aug.	1	1.5*	4.5*	13
	15	1.5*	4*	13
Sept.	1	1.5*	4*	13
	15	1.5*	4*	13
Oct.	1	2*	4*	13
	15	2*	5*	14
Nov.	1	2*	6	15
	15	2.5*	7	16.5
Dec.	1	3	18	18
	15	4	18	18

a/ Relating to the waters of Coulter Creek, the department is cognizant of a Settlement Agreement resulting from Cause No. 14262, in the Superior Court of the state of Washington for Mason County, "Peter E. Overton, et al., v. Washington Department of Fisheries, et al." Although the Department of Ecology was not a party in this litigation, the department will, to the extent possible, give full consideration to the intent of the Settlement Agreement in any future water right actions involving said parties; provided, that, said actions must be consistent with the requirements of chapters 90.03 and 90.44 RCW, and satisfy the general intent of chapter 173-515 WAC.

(2) Instream flow hydrographs, as represented in the document entitled "Instream Resources Protection Program," shall be used for definition of instream flows on those days not specifically identified in WAC 173-515-030(1).

(3) All consumptive water rights hereafter established shall be expressly subject to instream flows and closures established in WAC 173-515-030(1) and WAC 173-515-040(1) through (3). Closures override the instream flows where both are shown except as provided in WAC 173-515-070.

NEW SECTION

WAC 173-515-040 SURFACE WATER CLOSURES. (1) The department, having determined there are no waters available for further appropriation, closes the following streams to further consumptive appropriation. These closures confirm surface water source limitations previously established administratively under authority of chapter 90.03 RCW and RCW 75.20.050.

Surface Water Closures

**Stream numbers correlate with Plate I, Instream Resources Protection Program, Kitsap Water Resource Inventory Area (WRIA) 15.

Stream Number** Stream or Lake Name Sec., Twp., Rge. at Mouth	Tributary To	Date of Original Closure
Stansberry Lake and tributaries Sec. 19, T22N., R.1E.	Carr Inlet	5-17-66
Mission Lake and tributaries Outlet: NE¼W¼ Sec. 32, T.24N., R.1W.	Mission Creek	7-19-78
#12 Mission Creek and tributaries NW¼NE¼ Sec. 1, T.22N., R.2W.	Hood Canal	12-5-51
#57 Unnamed Stream and tributaries Sec. 20, T.21N., R.4W.	Hood Canal	11-3-48
#117 Seabeck Creek and tributaries SE¼SW¼ Sec. 20, T.25N., R.1W.	Seabeck Bay	8-27-54
#158 Unnamed Stream (Gamble Creek, Christianson Creek) and tributaries SW¼SW¼ Sec. 20, T.27N., R.2E.	Port Gamble	8-15-75
#207 Unnamed Stream (Dogfish Creek, Harding Creek) and tributaries NE¼NE¼ Sec. 15, T.26N., R.1E.	Liberty Bay	8-21-75

Stream Number** Stream or Lake Name Sec., Twp., Rge. at Mouth	Tributary To	Date of Original Closure
#245 Barker Creek and tributaries SW¼SW¼ Sec. 22, T.25N., R.1E.	Dyes Inlet	2-21-61
#246 Clear Creek and tributaries SE¼SW¼ Sec. 16, T.25N., R.1E.	Dyes Inlet	7-27-53
#259 Chico Creek and tributaries above confluence of Dickerson Creek, (excluding Wildcat Lake). Sec. 5, T.24N., R.1E.	Chico Bay	11-3-52
#259 Kitsap Creek and tributaries Sec. 5, T.24N., R.1E.	Chico Creek	7-2-42
#259 Unnamed stream and tributaries SE¼SW¼ Sec. 17, T.24N., R.1E.	Kitsap Lake	12-8-52
#279 Blackjack Creek and tributaries NE¼SE¼ Sec. 25, T.24N., R.1E.	Sinclair Inlet	4-5-60
#285 Unnamed Stream (Sullivan Creek) and tributaries NE¼SW¼ Sec. 19, T.24N., R.2E.	Sinclair Inlet	5-9-75
#294 Salmonberry Creek and tributaries NW¼SE¼ Sec. 18, T.23N., R.2E.	Long Lake	1-7-48
#356 Burley Creek and tributaries, SW¼NW¼ Sec. 12, T.22N., R.1E.	Burley Lagoon	5-10-51
#367 Minter Creek and tributaries SW¼NE¼ Sec. 29, T.22N., R.1E.	Henderson Bay	12-28-73
#402 Unnamed stream (Dutcher Creek) and tributaries NE¼NE¼ Sec. 15, T.21N., R.1W.	Dutcher Cove	3-10-54

Stream Number** Stream or Lake Name Sec., Twp., Rge. at Mouth	Tributary To	Date of Original Closure
#510 Judd Creek and tributaries NE¼NE¼ Sec. 18, T.22N., R.3E.	Quartermaster Harbor	5-10-51

(2) The department has determined that (a) certain streams exhibit low summer flows and have a potential for drying up or inhibiting anadromous fish passage during critical life stages, and (b) historic flow regimes and current uses of certain other streams indicate that no water is available for additional appropriation. Based upon these determinations and in accordance with the general intent of RCW 75.20.050, the following streams are closed to further appropriation for the periods indicated:

New Surface Water Closures

**Stream numbers correlate with Plate I, Instream Resources Protection Program, Kitsap Water Resource Inventory Area (WRIA) 15.

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary To	Period of Closure
#7 Union River and tributaries from the mouth to McKenna Falls (R.M. 6.7) SE¼SW¼ Sec. 29, T.23N., R.1W.	Hood Canal	All year
#44 Tahuya River and tributaries SE¼SE¼ Sec. 22, T.22N., R.3W.	Hood Canal	June 15-Oct. 15
#60 Rendsland Creek and tributaries NW¼NW¼ Sec. 19, T.22N., R.3W.	Hood Canal	June 1-Oct. 31
#70 Dewatto River and tributaries NW¼SE¼ Sec. 27, T.22N., R.3W.	Hood Canal	June 15-Oct. 31
#121 Big Beef Creek and tributaries SW¼SE¼ sec. 15, T.25N., R.1W.	Hood Canal	May 15-Oct. 31
#124 Anderson Creek and tributaries NW¼NW¼ Sec. 13, T.26N., R.1W.	Hood Canal	June 1-Oct. 31

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary To	Period of Closure
#192 Grover's Creek and tributaries NW¼SW¼ Sec. 4, T.26N., R.2E.	Puget Sound	June –Oct. 15
#223 Unnamed Stream (Steel Creek) and tributaries SE¼SE¼ Sec. 14, T.25N., R.1E.	Port Orchard	June 1-Oct. 15
#248 Unnamed Stream and tributaries (Strawberry/Cook's/Koch's Creek) SE¼NE¼ Sec. 20, T.25N., R.1E.	Dyes Inlet	June 1-Oct. 31
#259 Dickerson Creek and tributaries SW¼NW¼ Sec. 7, T.24N., R.1E.	Chico Creek	All year
#259 Chico Creek and tributaries below confluence of Dickerson Creek SW¼SW¼ Sec. 5, T.25N., R.1E.	Chico Bay	All year
#294 Curley Creek and tributaries NE¼NE¼ Sec. 18, T.23N., R.2E.	Yukon Harbor	June 15-Oct. 15
#313 Olalla Creek and tributaries SE¼NE¼ Sec. 4, T.22N., R.2E.	Colvos Passage	June 1-Oct. 15
#321 Crescent Creek and tributaries SE¼SW¼ Sec. 32, T.22N., R.2E.	Gig Harbor	June 1-Oct. 15
#354 Purdy Creek and tributaries NE¼NW¼ Sec. 12, T.22N., R.1E.	Henderson Bay	June 1-Oct. 31
#369 Lackey Creek and tributaries SE¼SW¼ Sec. 31, T.21N., R.1E.	Carr Inlet	June 1-Nov. 15
#415 Rocky Creek and tributaries SE¼SE¼ Sec. 27, T.22N., R.1E.	Case Inlet	June 1-Oct. 31

(3) In the Kitsap Basin numerous small streams with estimated mean annual flow of 5 cfs or less have been identified as having high instream values for anadromous fish, aesthetics,. water quality, and/or recreation. In accordance with the general intent of RCW 75.20.050, the department has determined that the total natural flow of these streams is required for protection and preservation of instream resources, and that no water is available for additional consumptive appropriation. The natural flow, in effect, constitutes the minimum flow for protection of the instream resources. The following streams possess such characteristics and are therefore closed year-round to further consumptive appropriation.

New Surface Water Closures

**Stream numbers correlate with Plate I, Instream Resources Protection Program, Kitsap Water Resource Inventory Area (WRIA) 15.

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to
#13 Little Mission Creek and tributaries SE¼NW¼ Sec. 1, T.22N., R.2W.	Hood Canal
#18 Stimson Creek and tributaries NW¼NW¼ Sec. 11, T.22N., R.2W.	Hood Canal
#31 Unnamed stream (Little Shoefly Creek) and tributaries SW¼NW¼ Sec. 17, T.22N., R.2W.	Hood Canal
#34 Shoefly Creek and tributaries SE¼SW¼ Sec. 18, T.22N., R.2W.	Hood Canal
#46 Caldervin Creek and tributaries NE¼NE¼ Sec. 28, T.21N., R.3W.	Hood Canal
#50 Hall Creek and tributaries Sec. 20, T.21N., R.3W.	Hood Canal
#52 Hoddy Creek and tributaries Sec. 20, T.21N., R.3W.	Hood Canal
#54 Fay Creek and tributaries Sec. 21, T.20N., R.3W.	Hood Canal

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to
#55 Brown Creek and tributaries Sec. 21, T.20N., R.3W.	Hood Canal
#56 Unnamed stream (West Creek) and tributaries Sec. 20, T.22N., R.3W.	Hood Canal
#101 Harding Creek and tributaries NW¼SW¼ Sec. 9, T.24N., R.2W.	Hood Canal
#164 Unnamed Stream (Little Boston Creek) and tributaries SW¼SW¼ Sec. 5, T.27N., R.2E.	Port Gamble
#181 Unnamed stream and tributaries SE¼SW¼ Sec. 26, T.27N., R.2E.	Apple Tree Cove
#184 Unnamed Stream and tributaries NE¼SW¼ Sec. 36, T.27N., R.2E.	Apple Tree Cove
#190 Unnamed Stream and tributaries Sec. 9, T.26N., R.2E.	Puget Sound
#196 Cowling Creek and tributaries NW¼NW¼ Sec. 16, T.26N., R.2E.	Miller Bay
#198 Thompson Creek and tributaries SW¼SE¼ Sec. 29, T.26N., R.2E.	Port Orchard
#208 Johnson Creek and tributaries SE¼NW¼ Sec. 22, T.26N., R.1E.	Liberty Bay
#213 Scandia Creek and tributaries SW¼NE¼ Sec. 27, T.26N., R.1E.	Liberty Bay
#242 Mosher Creek and tributaries SW¼NE¼ Sec. 34, T.25N., R.1E.	Dyes Inlet

Stream Number** Stream Name Sec., Twp., Rge. at Mouth	Tributary to
#272 Anderson Creek and tributaries SE¼NE¼ Sec. 33, T.24N., R.1E.	Sinclair Inlet
#275 Ross Creek and tributaries SE¼SE¼ Sec. 27, T.24N., R.1E.	Sinclair Inlet
#289 Beaver Creek and tributaries NW¼SE¼ Sec. 16, T.24N., R.2E.	Rich Passage
#322 North Creek and tributaries NE¼SE¼ Sec. 6, T.21N., R.2E.	Gig Harbor
#342 Unnamed stream and tributaries NW¼SE¼ Sec. 10, T.21N., R.1E.	Henderson Bay
#343 Unnamed Stream (Meyer Creek) and tributaries SW¼SW¼ Sec. 2, T.21N., R.1E.	Hood Canal
#407 Unnamed stream and tributaries SE¼NW¼ Sec. 2, T.21N., R.1W.	Vaughn bay
#434 Unnamed stream and tributaries SE¼SE¼ Sec. 15, T.25N., R.2E.	Murden Cove
#461 Unnamed stream and tributaries SE¼NE¼ Sec. 20, T.25N., R.2E.	Fletcher Bay
#514 Unnamed stream (Fisher Creek) and tributaries SW¼NW¼ Sec. 19, T.22N., R.3E.	Quartermaster Harbor
#530 Jod Creek and tributaries NW¼NW¼ Sec. 14, T.22N., R.2E.	Colvos Passage
#540 Needle Creek and tributaries NE¼SE¼ Sec. 13, T.23N., R.3E.	Colvos Passage

(4) Closures listed in WAC 173-515-040(2) and (3) will supersede low flow surface water source limitations previously imposed by administrative authority pursuant to chapter 75.20 RCW.

(5) Lakes perennially tributary to closed streams are closed to further consumptive appropriation.

NEW SECTION

WAC 173-515-050 GROUNDWATER. Future groundwater withdrawal proposals will not be affected by this chapter unless it is determined that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter.

NEW SECTION

WAC 173-515-060. LAKES. In future permitting actions relating to withdrawal of lake waters, lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.

NEW SECTION

WAC 173-515-070 EXEMPTIONS. (1) Nothing in this chapter shall affect existing water rights, riparian, appropriative, or otherwise, existing on the effective date of this chapter, nor shall it affect existing rights relating to the operation of any navigation, hydroelectric or water storage reservoir or related facilities.

(2) If, upon detailed analysis, appropriate and environmentally sound proposed storage facilities are found to be compatible with this chapter, such facilities may be approved but will be subject to the establishment of appropriate protection flows for drought or low runoff periods.

(3) Domestic use for a single residence shall be exempt from the provisions of this chapter. If the cumulative effects of numerous single domestic diversions would seriously affect the quantity of water available for instream uses, then domestic in-house use shall be exempt if no alternative source is available.

(4) Stockwatering use, except that related to feedlots, shall be exempt from the provisions established in this chapter.

(5) Future rights for nonconsumptive uses may be granted.

NEW SECTION

WAC 173-515-080 FUTURE RIGHTS. No right to divert or store public surface waters of the Kitsap Water Resource Inventory Area (WRIA) 15 shall hereafter be granted which shall conflict with the purpose of this chapter.

NEW SECTION

WAC 7.73-515-090 ENFORCEMENT. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 43.83B.335 .

NEW SECTION

WAC 173-515-100 REGULATION REVIEW. The rules in this chapter shall be reviewed by the department of ecology at least once in every five-year period.

APPENDIX B

SUMMARY OF STREAMS AND LAKES IN THE KITSAP BASIN

TABLE 1. STREAMS IN THE KITSAP BASIN—WATER RESOURCE INVENTORY AREA (WRIA) 15
[Table modified from Water Supply Bulletin No. 18 (1965). Stream numbers correlate with Plate I, Back Cover Pocket]

Stream No.	Name of Stream	Stream No.	Name of Stream	Stream No.	Name of Stream
1	Unnamed Stream	58	Nancy Creek	117	Seabeck Creek
2	Unnamed Stream	59	Unnamed Stream	118	Unnamed Stream
3	Unnamed Stream	60	Rendsland Creek	119	Unnamed Stream
4	Sweetwater Creek	61	Unnamed Stream	120	Little Beef Creek
5	Unnamed Stream	62	Ralph Creek	121	Big Beef Creek
6	Unnamed Stream	63	Bonnie Creek	122	Spring Creek
7	Union River	64	Unnamed Stream	123	Johnson Creek
	Bear Creek	65	Unnamed Stream	124	Anderson Creek
8	Unnamed Stream	66	Unnamed Stream	125	Unnamed Stream
9	Unnamed Stream	67	Unnamed Stream	126	Unnamed Stream
10	Unnamed Stream	68	Unnamed Stream	127	Unnamed Stream
11	Unnamed Stream	69	Unnamed Stream	128	Unnamed Stream
12	Mission Creek	70	Dewatto Creek	129	Unnamed Stream
13	Little Mission Creek	71	Unnamed Stream	130	Unnamed Stream
14	Unnamed Stream	72	Unnamed Stream	131	Unnamed Stream
15	Johnson Creek	73	Unnamed Stream	132	Unnamed Stream
16	Unnamed Stream	74	Unnamed Stream	133	Unnamed Stream
17	Unnamed Stream	75	Unnamed Stream	134	Unnamed Stream
18	Stimson Creek	76	Unnamed Stream	135	Unnamed Stream
19	Unnamed Stream	77	Unnamed Stream	136	Unnamed Stream
20	Unnamed Stream	78	Unnamed Stream	137	Unnamed Stream
21	Unnamed Stream	79	Unnamed Stream	138	Unnamed Stream
22	Unnamed Stream	80	Unnamed Stream	139	Unnamed Stream
23	Unnamed Stream	81	Unnamed Stream	140	Unnamed Stream
24	Unnamed Stream	82	Unnamed Stream	141	Unnamed Stream
25	Unnamed Stream	83	Unnamed Stream	142	Unnamed Stream
26	Unnamed Stream	84	Unnamed Stream	143	Unnamed Stream
27	Unnamed Stream	85	Unnamed Stream	144	Unnamed Stream
28	Unnamed Stream	86	Unnamed Stream	145	Unnamed Stream
29	Unnamed Stream	87	Unnamed Stream	146	Jump-Off Creek
30	Unnamed Stream	88	Unnamed Stream	147	Unnamed Stream
31	Little Shoefly Creek	89	Unnamed Stream	148	Unnamed Stream
32	Unnamed Stream	90	Unnamed Stream	149	South Unnamed Stream
33	Unnamed Stream	91	Unnamed Stream		East Unnamed Stream
34	Shoefly Creek	92	Unnamed Stream		Unnamed Stream
35	Anderson Creek	93	Unnamed Stream	150	Fern Creek
36	Unnamed Stream	94	Unnamed Stream	151	Unnamed Stream
37	Unnamed Stream	95	Thomas Creek	152	Hudson Creek
38	Unnamed Stream	96	Anderson Creek	153	Unnamed Stream
39	Unnamed Stream	97	Unnamed Stream	154	Unnamed Stream
40	Unnamed Stream	98	Unnamed Stream	155	Unnamed Stream
41	Unnamed Stream	99	Unnamed Stream	156	Unnamed Stream
42	Unnamed Stream	100	Unnamed Stream	157	Unnamed Stream
43	Unnamed Stream	101	Harding Creek	158	Gamble Creek
	Tahuya River	102	Unnamed Stream	159	Unnamed Stream
44	Gold Creek	103	Nellita Creek	160	Unnamed Stream
45	Unnamed Stream	104	Unnamed Stream	161	Unnamed Stream
46	Caldervin Creek	105	Unnamed Stream	162	Unnamed Stream
47	Unnamed Stream	106	Unnamed Stream	163	Unnamed Stream
48	Unnamed Stream	107	Unnamed Stream	164	Unnamed Stream
49	Unnamed Stream	108	Unnamed Stream	165	Unnamed Stream
50	Hall Creek	109	Unnamed Stream	166	Unnamed Stream
51	Unnamed Stream	110	Unnamed Stream	167	Unnamed Stream
52	Hoddy Creek	111	Boyce Creek	168	Buck Lake Outlet
53	Unnamed Stream	112	Unnamed Stream	169	Finland Creek
54	Fay Creek	113	Stavis Creek	170	Unnamed Stream
55	Browns Creek	114	Unnamed Stream	171	Unnamed Stream
56	Unnamed Stream	115	Unnamed Stream	172	Unnamed Stream
57	West Creek	116	Unnamed Stream	173	Silver Creek

TABLE 1 (Continued)

Stream No.	Name of Stream	Stream No.	Name of Stream	Stream No.	Name of Stream
174	Unnamed Stream	230	Unnamed Stream	279	Blackjack Creek
175	Unnamed Stream	231	Unnamed Stream	280	Unnamed Stream
176	Unnamed Stream	232	Unnamed Stream	281	Unnamed Stream
177	Unnamed Stream	233	Unnamed Stream	282	Annapolis Creek
178	Unnamed Stream	234	Unnamed Stream	283	Unnamed Stream
179	Unnamed Stream	235	Enetai Springs	284	Unnamed Stream
180	Unnamed Stream	236	Unnamed Stream	285	Sullivan Creek
181	Carpenter Lake Outlet	237	Unnamed Stream	286	Unnamed Stream
182	Unnamed Stream	238	Unnamed Stream	287	Unnamed Stream
183	Unnamed Stream	239	Unnamed Stream	288	Unnamed Stream
184	Unnamed Stream	240	Unnamed Stream	289	Beaver Creek
185	Unnamed Stream	241	Mosher Creek	290	Unnamed Stream
186	Unnamed Stream	242	Unnamed Stream	291	Duncan Creek
187	Unnamed Stream	243	Unnamed Stream	292	Unnamed Stream
188	Unnamed Stream	244	Unnamed Stream	293	Unnamed Stream
189	Unnamed Stream	245	Barker Creek	294	Salmonberry Creek
190	Unnamed Stream	246	Clear Creek		Curley Creek
191	Unnamed Stream		West Fork Clear Creek	295	Unnamed Stream
192	Grovers Creek		Clear Creek	296	Unnamed Stream
193	Unnamed Stream	247	Unnamed Stream	297	Unnamed Stream
194	Unnamed Stream	248	Strawberry Creek	298	Unnamed Stream
195	Unnamed Stream	249	Knapp Creek	299	Unnamed Stream
196	Unnamed Stream	250	Unnamed Stream	300	Unnamed Stream
197	Unnamed Stream	251	Woods Creek	301	Unnamed Stream
198	Thompson Creek	252	Unnamed Stream	302	Unnamed Stream
199	Unnamed Stream	253	Unnamed Stream	303	Unnamed Stream
200	Unnamed Stream	254	Unnamed Stream	304	Unnamed Stream
201	Unnamed Stream	255	Unnamed Stream	305	Wilson Creek
202	Unnamed Stream	256	Unnamed Stream	306	Unnamed Stream
203	Unnamed Stream	257	Unnamed Stream	307	Unnamed Stream
204	Unnamed Stream	258	Unnamed Stream	308	Phinney Creek
205	Unnamed Stream	259	Lost Creek	309	Unnamed Stream
206	Unnamed Stream		Wildcat Creek	310	Unnamed Stream
207	Dogfish Creek		Dickerson Creek	311	Unnamed Stream
	West Fork Dogfish Creek		Kitsap Creek	312	Unnamed Stream
	East Unnamed Stream		Chico Creek	313	Olalla Creek
	Dogfish Creek	260	Unnamed Stream		Olalla Creek
208	Johnson Creek	261	Unnamed Stream	314	Unnamed Stream
209	Unnamed Stream	262	Unnamed Stream	315	Unnamed Stream
210	Unnamed Stream	263	Unnamed Stream	316	Unnamed Stream
211	Unnamed Stream	264	Unnamed Stream	317	Unnamed Stream
212	Unnamed Stream	265	Unnamed Stream	318	Unnamed Stream
213	Scandia Creek	266	Wright Creek	319	Unnamed Stream
214	Jacques Creek	267	Unnamed Stream	320	Unnamed Stream
215	Perry Creek	268	Gorst Creek	321	Crescent Creek
216	Unnamed Stream		Heins Creek	322	North Creek
217	Unnamed Stream		Parish Creek	323	Unnamed Stream
218	Unnamed Stream		South Unnamed Stream	324	Unnamed Stream
219	Unnamed Stream		Gorst Creek	325	Unnamed Stream
220	Unnamed Stream	269	Unnamed Stream	326	Unnamed Stream
221	Unnamed Stream	270	Unnamed Stream	327	Sullivan Creek
222	Unnamed Stream	271	Unnamed Stream	328	Unnamed Stream
223	Steel Creek	272	Anderson Creek	329	Unnamed Stream
224	Unnamed Stream	273	Unnamed Stream	330	Artondale Creek
225	Unnamed Stream	274	Unnamed Stream	331	Unnamed Stream
226	Unnamed Stream	275	Ross Creek	332	Unnamed Stream
227	Unnamed Stream	276	Unnamed Stream	333	Unnamed Stream
228	Illahee Creek	277	Unnamed Stream	334	Unnamed Stream
220	Unnamed Stream	278	Unnamed Stream	335	Unnamed Stream

TABLE 1 (Continued)

Stream No.	Name of Stream	Stream No.	Name of Stream	Stream No.	Name of Stream
336	Unnamed Stream	392	Unnamed Stream	448	Unnamed Stream
337	Muri Creek	393	Unnamed Stream	449	Unnamed Stream
338	Unnamed Stream	394	Unnamed Stream	450	Unnamed Stream
339	Warren Creek	395	Unnamed Stream	451	Unnamed Stream
340	Unnamed Stream	396	Unnamed Stream	452	Unnamed Stream
341	Unnamed Stream	397	Unnamed Stream	453	Unnamed Stream
342	Unnamed Stream	398	Unnamed Stream	454	Unnamed Stream
343	Meyer Creek	399	Unnamed Stream	455	Unnamed Stream
344	Unnamed Stream	400	Unnamed Stream	456	Unnamed Stream
345	Unnamed Stream	401	Unnamed Stream	457	Unnamed Stream
346	Unnamed Stream	402	Dutcher Creek	458	Unnamed Stream
347	Unnamed Stream	403	Unnamed Stream	459	Unnamed Stream
348	Unnamed Stream	404	Unnamed Stream	460	Unnamed Stream
349	Marble Creek	405	Maple Creek	461	Unnamed Stream
350	McCormick Creek	406	Unnamed Stream	462	Unnamed Stream
351	Unnamed Stream	407	Unnamed Stream	463	Unnamed Stream
352	Unnamed Stream	408	Unnamed Stream	464	Unnamed Stream
353	Unnamed Stream	409	Unnamed Stream		
354	Purdy Creek	410	Unnamed Stream	VASHON ISLAND AND MAURY ISLAND	
355	Unnamed Stream	411	Unnamed Stream		
356	Bear Creek	412	Unnamed Stream	465	Unnamed Stream
	Burley Creek	413	Unnamed Stream	466	Unnamed Stream
357	Unnamed Stream	414	Unnamed Stream	467	Unnamed Stream
358	Unnamed Stream	415	Rocky Creek	468	Unnamed Stream
359	Unnamed Stream	416	Unnamed Stream	469	Unnamed Stream
360	Unnamed Stream	417	Unnamed Stream	470	Unnamed Stream
361	Unnamed Stream	418	Unnamed Stream	471	Unnamed Stream
362	Unnamed Stream	419	Sisson Creek	472	Unnamed Stream
363	Unnamed Stream	420	Unnamed Stream	473	Unnamed Stream
364	Unnamed Stream	421	Unnamed Stream	474	Unnamed Stream
365	Unnamed Stream	422	Unnamed Stream	475	Unnamed Stream
366	Unnamed Stream	423	Unnamed Stream	476	Unnamed Stream
367	Minter Creek	424	Unnamed Stream	477	Unnamed Stream
	Huge Creek	425	Coulter Creek	478	Unnamed Stream
	Minter Creek	426	Unnamed Stream	479	Beall Creek
368	Unnamed Stream			480	Unnamed Stream
369	Lackey Creek	BAINBRIDGE ISLAND		481	Unnamed Stream
370	Unnamed Stream			482	Unnamed Stream
371	Unnamed Stream	427	Unnamed Stream	483	Unnamed Stream
372	Unnamed Stream	428	Unnamed Stream	484	Unnamed Stream
373	Unnamed Stream	429	Unnamed Stream	485	Unnamed Stream
374	Unnamed Stream	430	Unnamed Stream	486	Unnamed Stream
375	Unnamed Stream	431	Port Madison Creek	487	Unnamed Stream
376	Unnamed Stream	432	Unnamed Stream	488	Unnamed Stream
377	Unnamed Stream	433	Unnamed Stream	489	Unnamed Stream
378	Unnamed Stream	434	Unnamed Stream	490	Unnamed Stream
379	Unnamed Stream	435	Unnamed Stream	491	Unnamed Stream
380	Bay Lake Outlet	436	Unnamed Stream	492	Unnamed Stream
381	Unnamed Stream	437	Unnamed Stream	493	Unnamed Stream
382	Unnamed Stream	438	Unnamed Stream	494	Unnamed Stream
383	Unnamed Stream	439	Unnamed Stream	495	Unnamed Stream
384	Unnamed Stream	440	Unnamed Stream	496	Unnamed Stream
385	Unnamed Stream	441	Unnamed Stream	497	Unnamed Stream
386	Unnamed Stream	442	Unnamed Stream	498	Unnamed Stream
387	Unnamed Stream	443	Unnamed Stream	499	Unnamed Stream
388	Unnamed Stream	444	Unnamed Stream	500	Unnamed Stream
389	Unnamed Stream	445	Unnamed Stream	501	Unnamed Stream
390	Unnamed Stream	446	Unnamed Stream	502	Unnamed Stream
391	Unnamed Stream	447	Unnamed Stream	503	Unnamed Stream

TABLE 1 (Continued)

Stream No.	Name of Stream	Stream No.	Name of Stream	Stream No.	Name of Stream
504	Unnamed Stream		McNEIL ISLAND		
505	Unnamed Stream				
506	Unnamed Stream	556	Unnamed Stream		
507	Unnamed Stream	557	Eden Creek		
508	Unnamed Stream	558	Luhr Creek		
509	Unnamed Stream	559	Bradley Creek		
510	Judd Creek				
511	Unnamed Stream		ANDERSON ISLAND		
512	Unnamed Stream				
513	Unnamed Stream	560	Unnamed Stream		
514	Fisher Creek	561	Unnamed Stream		
515	Unnamed Stream	562	Unnamed Stream		
516	Unnamed Stream	563	Unnamed Stream		
517	Unnamed Stream	564	Unnamed Stream		
518	Tahlequah Creek	565	Josephine Lake Outlet		
519	Unnamed Stream	566	Unnamed Stream		
520	Unnamed Stream	567	Unnamed Stream		
521	Unnamed Stream	568	Unnamed Stream		
522	Unnamed Stream	569	Unnamed Stream		
523	Unnamed Stream	570	Unnamed Stream		
524	Unnamed Stream	571	Unnamed Stream		
525	Unnamed Stream	572	Unnamed Stream		
526	Unnamed Stream	573	Unnamed Stream		
527	Unnamed Stream	574	Unnamed Stream		
528	Unnamed Stream	575	Unnamed Stream		
529	Unnamed Stream	576	Unnamed Stream		
530	Jod Creek	577	Unnamed Stream		
531	Green Valley Creek	578	Unnamed Stream		
532	Unnamed Stream	579	Unnamed Stream		
533	Unnamed Stream	580	Unnamed Stream		
534	Unnamed Stream	581	Unnamed Stream		
535	Unnamed Stream	582	Unnamed Stream		
536	Unnamed Stream				
537	Unnamed Stream				
538	Unnamed Stream				
539	Unnamed Stream				
540	Needle Creek				
541	Unnamed Stream				
542	Unnamed Stream				
543	Unnamed Stream				
544	Unnamed Stream				
545	Unnamed Stream				
546	Unnamed Stream				
547	Unnamed Stream				
	FOX ISLAND				
548	Myrtle Creek				
549	Spring Creek				
550	Unnamed Stream				
551	Unnamed Stream				
552	Unnamed Stream				
553	Unnamed Stream				
554	Unnamed Stream				
555	Unnamed Stream				

TABLE 2. LAKES AND RESERVOIRS IN THE KITSAP BASIN (WRIA 15), INCLUDING UNNAMED LAKES ONE ACRE OR MORE IN SURFACE AREA.
[Table modified from Water Supply Bulletin No. 18 (1965)]

Location					
Section	Township	Range	Name	Approximate area in acres	Drainage
KING COUNTY					
13	T22N	R2E	Wildwood Pond	1.7	Quartermaster Harbor
6	T22N	R3E	Matsuda Reservoir	1.0	Judd Creek & Quartermaster Harbor
16			Unnamed Lake	1.2	Puget Sound
30	T23N	R3E	Unnamed Lake	1.3	Unnamed stream to Fern Cove
31			Unnamed Lake	3.1	Judd Creek & Quartermaster Harbor
KITSAP COUNTY					
1	T22N	R1W	Unnamed Lake	3.0	Rocky Creek to Case Inlet
2			Wye Lake	37.9	Fern Lake to Rocky Creek & Case Inlet
10			Fern Lake	19.0	Rocky Creek to Case Inlet
11			Unnamed Lake	1.1	Rocky Creek to Case Inlet
15	T23N	R1W	Lider Lake	2.8	Union River to Hood Canal
24			Unnamed Lake	2.0	Coulter Creek to North Bay
26			Kriegler Lake	10.5	Coulter Creek to North Bay
36			Unnamed Lake	3.0	Rocky Creek to Case Inlet
36			Bear Lake	12.1	Rocky Creek to Case Inlet
3	T23N	R2W	Unnamed Lake		Tahuya River
2	T24N	R1W	Wildcat Lake	111.6	Wildcat Creek to Dyes Inlet
9			Scout Lake	3.0	Tin Mine Creek to Tahuya River
17			Tahuya Lake	17.9	Tahuya River
22			Unnamed Lake	4.0	Gold Creek to Tahuya River
26			Union River Reservoir	93.0	Union River to Hood Canal
30			McCaslin Marsh	24.0	Tahuya River
31			Panther Lake	103.6	Panther Creek to Tahuya River
32			Mission Lake	87.7	Mission Creek to Hood Canal
33			Mission Pond	4.0	Bear Creek to Union River
35			Twin Lakes	21.7	No outlet, lies in Gorst Creek Drainage
13	T24N	R2W	Big Beef Ponds	5.0	Hood Canal
14			Unnamed Lake	7.0	Anderson Creek to Hood Canal
23			Hintzville Beaver Ponds	3.0	Stavis Creek to Stavis Bay
23			Unnamed Lake	5.0	Tahuya River
26			Morgan Marsh	95.0	Big Beef Creek & Hood Canal
27			Unnamed Lakes (1)	2.2	Hood Canal
			(2)	1.9	Hood Canal
27			Mulholland Marsh	6.5	Tahuya River
31			Ludvick Lake	2.0	Dewatto River
34			Intermittent Lake	2.0	Tahuya River
34			Unnamed Lake	1.0	Blacksmith Lake to Tahuya River
35			Unnamed Lake	15.0	Tahuya River
36			Spur 3 Pond	1.0	Tahuya River
15	T25N	R1W	Unnamed Lake	1.4	Hood Canal
17			Unnamed Lake	1.0	Hood Canal
20			Unnamed Lake	3.5	Seabeck Bay
20			Unnamed Lake	1.4	Seabeck Bay
27			Unnamed Lake	1.0	Big Beef Creek to Hood Canal
30			Unnamed Lake	4.3	Hood Canal
33			Sprague Pond	2.3	Big Beef Creek to Hood Canal
10	T22N	R1E	Intermittent Lake	4.0	Minter Creek to Carr Inlet
10			Horseshoe Lake	40.3	Bear Creek to Burley Creek
5	T22N	R2E	Mace Lake	2.2	Olalla Creek to Colvos Passage
3	T23N	R1E	Berry Lakes (1)	0.3	Blackjack Creek to Sinclair Inlet
			(2)	3.3	Blackjack Creek to Sinclair Inlet
3			Honey Lake	1.0	Blackjack Creek to Sinclair Inlet

TABLE 2 (Continued)

Section	Township	Location Range	Name	Approximate area in acres	Drainage
KITSAP COUNTY (Continued)					
9			North Lake	6.5	Ross Creek to Sinclair Inlet
12			Unnamed Lake	1.0	Sinclair Inlet
14			Deep Lake	2.8	Blackjack Creek to Sinclair Inlet
16			Square Lake	7.9	Square Creek to Sinclair Inlet
17			Nels Johnson Lake (1)	4.0	Sinclair Inlet
			(2)	5.0	Sinclair Inlet
20			Flora Lake	6.5	Sinclair Inlet
21			Mathews Lake	3.1	Sinclair Inlet
27			Wildwood Lake	7.0	Sinclair Inlet
29	T23N	R1E	Wicks Lake	9.0	Huge Creek to Carr Inlet
30			Fairview Lake	7.4	Rocky Creek to Case Inlet
30			Hidden Lake	1.0	Rocky Creek & Case Inlet
30			Sailor Lake	1.9	Rocky Creek to Case Inlet
31			Intermittent Lake	5.0	Rocky Creek to Case Inlet
31			Helena Lake	5.9	Rocky Creek to Case Inlet
31			Skunk Lake	7.0	Rocky Creek to Case Inlet
8	T23N	R2E	Long Lake	314.0	Curley Creek to Yukon Harbor
33			Intermittent Lake	1.0	Olalla Creek & Colvos Passage
1	T24N	R1E	Unnamed Lake	1.2	Port Orchard & Sinclair Inlet
1			Clair Marsh (East Segment)	10.2	Lies in Unnamed Stream Drainage tributary to Port Washington Narrows
2			Clair Marsh (West Segment	12.7	Lies in Unnamed Stream Drainage tributary to Port Washington Narrows
5			Buggington Pond	1.0	Chico Bay to Dyes Inlet
8			Puget Sound Navy Yard Lake	3.0	Dyes Inlet
8			Carter Pond	0.6	Kitsap Creek to Dyes Inlet
8			Kitsap Lake	238.4	Kitsap Creek to Dyes Inlet
18			Beaver Dam Lake	4.9	Dickerson Creek to Dyes Inlet
19			Heins Lake	5.2	Alexander Lake to Sinclair Inlet
21			Abondoned Reservoir	2.0	Sinclair Inlet
21			Bremerton Reservoir	1.2	Sinclair Inlet
25			Unnamed Lake	2.4	Sinclair Inlet
27			Unnamed Lake	1.3	Sinclair Inlet
29			Jarstad Lake	2.0	Gorst Creek to Sinclair Inlet
30			Alexander Lake	19.5	Heins Creek to Sinclair Inlet
33			Hunts Mill Pond	2.0	Sinclair Inlet
34			Unnamed Lake	1.3	Ross Creek to Sinclair Inlet
3	T24N	R2E	Unnamed Lake	2.8	Port Blakely Harbor
11			Unnamed Lake	2.2	Puget Sound
12			Unnamed Lake	1.5	Puget Sound
21			Unnamed Lake	1.9	Beaver Creek to Clam Bay
3	T25N	R1E	Island Lake	42.7	Barker Creek to Dyes Inlet
13			Unnamed Lake	1.0	Port Orchard
23			Glud Ponds	1.0	Steel Creek to Burke Bay
25			Unnamed Lake	2.5	Port Orchard, Puget Sound
4	T25N	R2E	Erickson Reservoir	1.7	Manzanita Bay, Port Orchard
16			Unnamed Reservoir	2.0	Puget Sound
28			Unnamed Reservoir	1.8	Fletcher Bay
32			Gazzam Lake	12.7	Port Orchard
19	T26N	R1E	Bangor Lake	4.6	Hood Canal
36			Keyport Lagoon	22.4	Port Orchard
7	T26N	R3E	Unnamed Lake	3.5	Puget Sound
18			Unnamed Lake	3.0	Puget Sound
25	T27N	R1E	Intermittent Lake	16.0	Hood Canal
21	T27N	R2E	Miller Lake	25.7	Port Gamble Harbor
27			Carpenter Lake	23.4	Appletree Cove
33			Niemeier Ponds	1.0	Miller Bay
21	T28N	R2E	Buck Lake	19.8	Puget Sound

TABLE 2 (Continued)

Section	Township	Location Range	Name	Approximate area in acres	Drainage
MASON COUNTY					
6	T22N	R2W	Howell Lake	9.6	Tahuya River
3	T22N	R3W	Cady Lake	14.9	Dewatto River & Hood Canal
4			"U" Lake	16.2	Hood Canal via Robbins Lake
4			Don Lake	17.1	Hood Canal
4			Lone Duck Pond	3.5	Hood Canal
5			Robbins Lake	16.8	Hood Canal
11			Unnamed Lake	2.5	Rendsland Creek to Hood Canal
11			Unnamed Lake	1.5	Rendsland Creek & Hood Canal
11			Unnamed Lake	2.3	Tahuya River
11			Nigger Slough	16.0	Tahuya River
14			Maggle Lake	22.3	Tahuya River & Hood Canal
14			Dry Pond	2.4	Tahuya River
15			Grass Lake	2.5	Hood Canal
15			Jiggs Lake	8.8	Tahuya River
16			Wood Lake	10.0	Hood Canal
16	T22N	R3W	Wildberry Lake	8.1	Lower Rendsland Creek & Hood Canal
27			Wheeler Lake	8.0	Hood Canal
5	T23N	R1W	Tiger Lake	109.1	Mission Creek to Hood Canal
6			Unnamed Lake	7.4	Mission Creek & Hood Canal
30			Larson Lake	1.7	Union River
3	T23N	R2W	Unnamed Lake	1.0	Tahuya River
3			Blacksmith lake	18.3	Tahuya River
4			Erickson Lake	15.2	Dewatto River
8			Intermittent Lake	4.6	Dewatto River
8			Intermittent Lake	6.8	Dewatto River
9			Unnamed Lake	1.5	Tahuya River
9			Unnamed Lakes	3.0	Tahuya River
10			Unnamed Lake	3.4	Tahuya River
14			Camp Pond	5.9	Tahuya River
14			Suckell Pond	14.0	Long Marsh via Goat Ranch Lake & to Tahuya River
15			Oak Patch Lake	6.2	Tahuya River
17			Intermittent Lake	2.5	Tahuya River
17			Twin Lakes (Big Twin)	15.2	Little Twin L& Tahuya River
			(Little Twin	5.5	Tahuya River
19			Wooten Lake	69.8	Haven Lake & Tahuya River
20			Bennettsen Lake	25.4	Tahuya River
23			Goat Ranch Lake	20.0	Tahuya River to Hood Canal
26			Long Marsh	Dry in summer	Tahuya River to Hood Canal
30			Haven Lake	70.5	Tahuya River
31			Erdman Lake	17.4	Tahuya River
31			Collins Lake	4.3	Tahuya River
12	T23N	R3W	Unnamed Lake	3.53	Dewatto River & Hood Canal
13			Oak Lake	15.0	Dewatto River to Hood Canal
25			Larson Lake	9.0	Shoe Lake & Dewatto River to Hood Canal
32			Aldrich Lake	9.8	Hood Canal
35			Unnamed Lake	2.0	Dewato River to Hood Canal
35			Tee Lake	38.4	Rendsland Creek to Hood Canal
35			Unnamed Lake	3.0	Rendsland Creek to Hood Canal
36			Shoe Lake	6.0	Dewatto River & Hood Canal

TABLE 2 (Continued)

Location					
Section	Township	Range	Name	Approximate area in acres	Drainage
PIERCE COUNTY					
1	T20N	R1W	Bay Lake	129.6	Mayo Cove, Carr Inlet
5			Unnamed Lake	4.5	Case Inlet
10			Palmer Lake	8.5	Case Inlet
10			Little Palmer Lake	4.3	Case Inlet
22			Gravel Pit Lake		Case Inlet
22			Unnamed Lake	14.9	Case Inlet
26			Unnamed Lake	1.0	Taylor Bay, Nisqually Reach
22	T21N	R1W	Unnamed Reservoir	6.8	Case Inlet
23			Jackson Lake	15.8	Carr Inlet
33			Unnamed Lake	1.2	Case Inlet
33			Herron Lake	9.9	Case Inlet
14	T22N	R1W	Carney Lake	39.2	Rocky Creek to Case Inlet
4	T19N	R1E	Florence Lake	66.5	Josephine Lake & Nisqually Reach
8			Unnamed Lake	0.9	Ora Bay, Nisqually Reach
8			Anderson Island Pothole	2.8	Nisqually Reach
9			Josephine Lake	72.5	Nisqually Reach, Puget Sound
17	T20N	R1E	Floyd Cove Reservoir	2.0	Pitt Passage
17			Lulhr Creek Reservoir	0.7	Luhr Creek to Pitt Passage
20			Eden Creek Reservoir	10.0	Eden Creek to Balch Passage
21			Butterworth Reservoir	100.0	Eden Creek to Balch Passage
27			Anderson Pond	1.5	Puget Sound
3	T21N	R1E	Unnamed Lake	2.4	Henderson Bay, Carr Inlet
12			Maloney Lake	5.3	Artondale Creek & Wollochet Bay, Hale Passage
19	T22N	R1E	Stansberry Lake	18.6	Carr Inlet
19			Doyle Pond	10.2	Carr Inlet
32			Intermittent Lake	17.0	Carr Inlet
19	T22N	R2E	Intermittent Lake	1.9	Henderson Bay, Carr Inlet
20			Crescent Lake	46.8	Crescent Creek to Gig Harbor
30			Unnamed Lake	3.1	McCormick Creek & Henderson Bay
33			Unnamed Lake	2.8	Colvos Passage

APPENDIX C

COMMENTS

INDEX-COMMENTS AND RESPONSES

Four public hearings were held on January 7 and 8, 1981 to receive public comments on the Kitsap Instream Resources Protection Program and Proposed Rules.

Appendix C contains a summary of the issues raised at the public hearings and written statements received by the Department of Ecology during the two months comment period.

We sincerely thank those agencies and individuals who took the time to formally respond.

Appendix D contains the department's responses to comments.

For ease of reference, the comments and responses have been numbered. The following index indicates the page number in Appendix D where the department's responses to the comments are found.

I. SUMMARY, PUBLIC HEARING TESTIMONY

A. BELFAIR, MASON COUNTY, WASHINGTON

Statements were given in support of the Kitsap Instream Resources Protection Program by:

Ms. Irene B. Davis, North Mason League of Women Voters
Mr. Millard Deusen, Washington Department of Fisheries
Dr. Hal Beecher, Fish ecologist, Washington Department of Game

Other Statements:

Mr. Ed Johnston, Mason County Commissioner.

Mr. Johnston expressed a concern that the Department of Ecology is:

1. Imposing stream closures on a "blanket-type coverage";

2. That individual property rights are being overlooked in order to promote the general welfare; and

3. The government is infringing on personal property rights prior to the need, that in many cases the fish, wildlife, and aesthetic values, etc. have not been determined to be in danger.

Mr. Peter E. Overton, Property Owner, Coulter Creek Water Shed

4. The department is taking a blanket approach to closures.

5. Land owners are not contacted about the program;

6. People do not know what a closure or an instream flow is;

7. We do not need regulations on Coulter Creek – Department of Fisheries Water rights (27 cfs) protects the flow in Coulter Creek.

8. Closures will hurt some property owners that don't have to be hurt.

NOTE: Also see Comments, pages C-23, C-36, Appendix C, and responses, pages D-39 to D-43, Appendix D.

Mr. Jerry Reid, Alpine Evergreen, Inc. and Reid Realty, Inc.

9. DOE is closing the whole basin in areas without receiving put from people who own property in those areas.

10. Some of the things people purchased their property for are not going to happen.

Mr. Gene Hooker, McCormick Land Company

11. Need for the Instream Flow Program is doubtful;

12. Questions the amount of money that has gone into the program.

B. BREMERTON, MASON COUNTY, WASHINGTON

Statements were given in support of the Kitsap Instream Resources Protection Program by:

Dr. Hal Beecher, Fish Ecologist, WA Dept. of Game
Mr. Millard Deusen, Biologist, Washington Department of Fisheries
Mr. Paul Dorn, Biologist, Suquamish Indian Tribe
Mr. Toby Thaylor, Attorney, Point-No-Point Treaty Council

Mr. Paul Dorn, Biologist, Suquamish Indian Tribe:

13. "My name is Paul Dorn, I'm here on behalf of the Suquamish Indian Tribe. The Suquamish Indian Tribes' usual and accustomed fishing areas generally include the waters of east Kitsap County, and as such, most of our comments are directed toward the streams entering into these waters. We would like to thank the Department of Ecology for the considerable effort put into this Instream Water Resources Protection Program, and its recognition through state statutes of the need to protect fish, wildlife, and vegetation depending on streamflows. The Suquamish, as signatories to the treaty at Point Elliott of 1855, were granted specific treaty guarantees to insure perpetuation of tribal fishing harvests. This treaty n recent court decisions recognized the need to maintain sufficient quality and quantity of water and instream flows to insure continuation of natural salmon production. Therefore, Indian treaty rights on the Kitsap Peninsula, predate all water right claims filed after 1855. The Suquamish generally support all of the recommendations made in the east Kitsap area for stream that we find in the pamphlet, but we would recommend complete closure of Grovers Creek, for reasons of a salmon hatchery which is being constructed for coho and chinook production on that stream, and we would recommend closure during low flow periods at Gorst Creek. Thank you."

Other Statements:

Mr. Toby Thaylor, Attorney, Point-No-Point Treaty Council:

14. "My name is Toby Thaylor, I'm here on behalf of the Point-No-Point Treaty Council, for general educational purposes I will explain the jurisdictional coverage of the Point-No-Point Treaty Council. the PNPTC is a fisheries management consortium representing three different tribes – Skokomish, Lower Elwha Klallam, and Port Gamble Klallam. The seated area of the PNPTC includes the western half of the Kitsap county as well as the eastern portion of the Olympic Peninsula, and the northern portion also facing the Straits of Juan De Fuca. The PNPTC have an interest in the fisheries resources, I don't need to go into that, the PNPTC generally support this program because it generally addresses the concerns of preserving the instream flows of the western Kitsap Peninsula streams sufficient to protect the salmon runs which are there. I would like to comment on some references in the program on page 29 and 30. There is an indication, references to comprehensive water plans by various agencies, the City of Bremerton, Mason County, and Pierce County. All of these plans indicate that there are proposals in the works to withdraw water from east Olympics rivers to supply the City of Bremerton, City of Tacoma, etc. As long as this plan is going to make reference to these plans, we would like to go on record as very strongly opposing any attempts to withdraw waters from the east Olympic rivers for export to the urban areas of Puget Sound, and any attempts will be vigorously opposed."

Mr. Charles Moore, City of Bremerton Water Department:

15. Mr. Moore made a statement that the hydrological information used in the Kitsap Instream Resources Protection Program to make instream flow determinations is up to 21 years old. He said that climate had changed in the area, and consequently, the Union River, Bremerton's major water supply source has changed.

Mr. Moore went on to say:

> "Since 1957, when the Casad Dam was built, the Union River has been our main source of water for our city and we now take about 85% of our water supply from that source. In the future, probably 10 years from now, we will have to go back to Gorst Creek for our supply, but to do this we will have to build a filter plant to satisfy the DSHS requirements. In 1980, the average use was 14.6 mgd, and this included the wells at Anderson Creek and East Bremerton, it also includes the 1 and 2 cfs that we allow to go through the weir at McKenna Falls to allow for the game and fisheries department for flows for fish. Thank you."

Mr. Michael R. McCormick, Associate, Dick Tracy Associates, Planning Consultants

16. See written statement, pages C-19 to C-22, Appendix C, and DOE responses pages D-30 to D-39, Appendix D.

D. VASHON, KING COUNTY, WASHINGTON

Statements were given to support of the Kitsap Instream Resources Protection Program by:

Mr. Bill Tobin, Private Citizen, Vashon, WA
Mr. Clyde R. Jensen, Private Citizen, Vashon, WA.
Dr. Hal Beecher, Fish Ecologist, Washington Department of Game

Other Statements:

Ms. Margery Smith, Westside Water Association:

17. See written statement page C-8, Appendix C, and DOE Response, Pages D-12 to D-13, Appendix D.

Mr. Roy Wilkerson, King County Water District No. 19

18. "I am Roy Wilkerson, manager of King County Water District 19. The island has recently been working on a comprehensive plan sponsored by King County and one of the areas of concern was the amount of water that was available for consumption. King county does not know how much water is available for Water District #19. The county has appropriated about $42,000 in order to try to gain some additional information about water available for domestic use. The national environmental act and the state environmental policy act placed upon governmental agencies certain responsibilities as far as considering other people's welfare when an action is taken such as closing stream flows as is being done in regard to this hearing. My concern is that I don't think those areas of consumptive use have been considered enough and I think that they should be paid more attention to before a decision is made. Thank you."

D. GIG HARBOR, PIERCE COUNTY, WASHINGTON

Statements were given in support of the Kitsap Instream Resource Protection Program by:

Mr. E. R. Nicolai, President, Purdy Clubhouse Association
Dr. Hal Beecher, Fish Ecologist, Washington Department of Game
Mr. Gordon Zillges, Biologist, Washington Department of Fisheries

Other Statements:

Mr. David Morris, Private Citizen, Gig Harbor

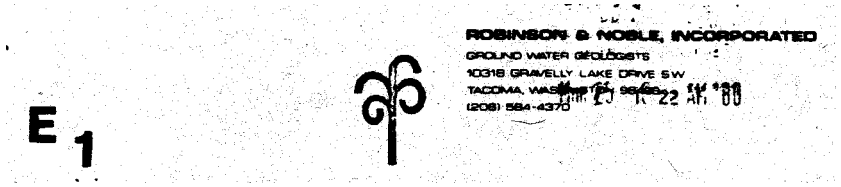
19. See written statement, page C-10, Appendix C, and DOE responses, pages D-15 to D-22, Appendix D.

Ms. Pat Wiles, Harbor Water Company, Gig Harbor

20. See written statement, page C-15, Appendix C, and DOE response, pages D-26 to D-27, Appendix D

Mr. Dave Allard and Mr. Paul Allard, Private Citizens

21. A concern was expressed for clarification of the circumstances under which wells would be subject to instream flow requirements, i.e., required distance of a new well from a stream.



March 24, 1980

Ms. Jeanne Holloman
DEPARTMENT OF ECOLOGY
Mail Stop PV-11
Olympia, WA 98504

Re: Draft of Kitsap Basin Instream
Resources Protection Program

Dear Ms. Holloman:

22. The proposal to close most of the larger streams in the area may be expected to have a massive impact on further development. Although surface water is seldom used directly in the area, the relation to ground water is of great importance. There are many large areas underlain b shallow aquifers that provide base flow to the streams proposed for closure. The proposed regulations will prevent this economical shallow water from being appropriated.

It appears to me that a stroke of a departmental pen can essentially prevent property development in favor of protecting anadramous fish. I don't think that decision should be made at administrative level.

The subject area is unlike most of the state in that there are no major rivers and the water supplies are dependent on a very localized hydrologic cycle. Your paper states that importation of water from major streams from the Olympics has been proposed. There are no firm plans for this. Furthermore, a dam, probably a treatment facility and a massive transmission system will cost tens of millions of dollars. Perhaps the foreseeable future limits to development will be set by these costs. The act of closing appropriation of much more economical water could trigger the need for importation. If done, development would flourish and actually negate the very reason for the proposed closures.

Ms. Jeanne Holloman
D.O.E.
March 24, 1980

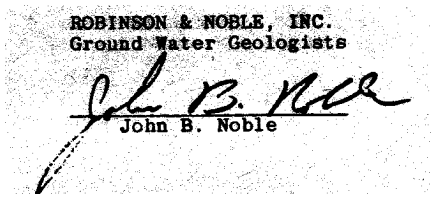
Page two

It is my opinion that the subject proposal should not be implemented as written but should be handled on a case by case basis.

You specifically asked for comments on ground water information in Appendix C. That section is developed from oversimplified and dated information and some of it is in error. The section adds no special purpose to the draft and I suggest that it be deleted. The identity of the very complex aquifer systems in the area is not sufficiently understood. My experience has shown that people tend to believe the oversimplified description of Molenaar and Hanson. The real world is far different. Every well we work with in this area is a new adventure in which the unpredictable is sure to happen.

I apologize for being so negative about the draft, but these are my considered opinions and I appreciate the opportunity to comment.

Very truly yours,



JBN/in
c.c. Gene Wallace
Ted Wright (Kitsap County PUD)

E2

ROBINSON, NOBLE & CARR, INC.
ORCHARD STREET WEST
TACOMA, WASHINGTON
(206) 475-

December 15, 1980

Glen H. Fiedler
OFFICE OF WATER PROGRAMS
DEPARTMENT OF ECOLOGY
Mail Stop PV-11
Olympia, WA 98504

Re: Comments on Kitsap Instream Protection Program

Gentlemen:

The referenced proposed administrative rules include WAC 173-515-050:

> "GROUNDWATER. Future groundwater withdrawal proposals will not be affected by this chapter unless it is determined that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter."

23. The proposed rules also effectively close numerous streams from <u>any</u> further depletion during times varying between all year and summer months only. Most, if not all of these streams have a significant ground water baseflow component during the summer an fall.

24. Strict interpretation of the proposed rules will absolutely preclude the use of wells for public water supplies if the wells tap aquifers that contribute to base flow and if no prior water right exists.

25. The result will be an administrative closure of thousands of acres of land to uses requiring water other than from single-family domestic wells. These would be lands where:

- Usable aquifers contribute to the base flow of closed streams.

- Deeper aquifers do not exist, are insufficient or, if used, induce leakage from shallower aquifers.
- Other permitted sources are unavailable because of engineering or economic constraints.

26. It is here suggested that Department of Ecology should provide a reasonably accurate definition of lands so affected. If these areas are delineated, those interested in land-use planning will be better informed of the effects of the proposed action.

Very truly yours,

ROBINSON, NOBLE & CARR, INC.

John B. Noble

JBN/in
c.c. Peter Overton
Kitsap County PUD No.1
K.C.W.D. 19 (Vashon)

F

STATE OF WASHINGTON
Dixy Lee Ray
Governor

DEPARTMENT OF TRANSPORTATION
Highway Administration Building, Olympia, Washington 98504 206/753-6005

January 8, 1981 JAN 13

Ms. Jeanne Holloman
Program Planner
Department of Ecology PV-11
Olympia, Washington 98504

Department of Ecology
Instream Resources Protection Program
Kitsap Water Resource Inventory Area 15

Dear Ms. Holloman:

27. We have reviewed the subject document and have the following comment:

> While the Instream Resources Protection Program is not designed to improve water quality, establishment of flow levels will help maintain a high level of water quality in streams by protecting given quantities of water for dilution and transport of pollutant. The Washington State Department of Transportation generally supports this program.

If you have any questions, please call Jim Leonard at 753-6644.

Sincerely,

ROBERT S. NIELSEN
Assistant Secretary for Public Transportation and Planning

By: JOSEPH BELL, Manager
Planning Implementation and Environmental Policy

RSN:kls
JB/WBH

cc: R.E.Brockstruck

G

P.O. Box 467
Vashon, Wa. 98070

January 10, 1981

Mr. Kenneth O. Slattery
Office of Water Programs
St. of Wash. Dept. of Ecology
Olympia, Washington 98504

Dear Mr. Slattery,

28. On January 1, 1981 I attended a meeting at Ober Park on Vashon Island pertaining to the Instream Resources Protection Program. I raised a question there and at your suggestion I am also putting it in writing.

Westside Water Assoc. owns acreage at the headwaters of Needle Creek, a stream proposed to be closed to further taking of water for consumptive use.

Westside Water considers the property to be watershed area. We take water from several springs that also feed the creek. We have not developed all of the springs. Those that we have developed hardly know it, as considerable water still feeds the creek. In dry weather the springs do not noticeably reduce their flow. The Dept. of Social and Health Services has approved our present method of taking water and with what we now collect, has given us permission to serve up to 225 residences. We currently serve about 175 customers. We anticipate the need to further develop the springs to more consistently take the water we are permitted at this time.

Sources of water in our franchise area are not abundant. Several wells have been tried with most of them unsuccessful. For some property wells are not an option because they are less than five acres. Our area has little shoreline, all of which is subdivided just about as far as codes allow with one or two exceptions. Shoreline spring development does not seem feasible. There are two cisterns on our system, one not complete and reportedly satisfactory. A geologic survey done some time ago revealed that there were not other water sources of sufficient magnitude to be commercially developable.

As a water company we are not interested in extending our franchise area. In fact our by-laws state that any prospective new customer must bear the entire cost of updating the system or extending it if the need is there to serve their property. Our only concern is to serve property within our franchise. At the present time Westside Water is about the only feasible, if not totally practical water source for property owners.

The question I raise is – If Westside Water is a water purveyor and no other alternative source is practical, does the company have a legal obligation to further expand the system to serve property in our franchise area once we reach currently allowed capacity? Can the state compel us to provide water and at the same time prohibit us from taking it from our essential watershed area?

Respectfully yours,

Margery Smith

Margery Smith
Secretary-Treasurer

H

STATE OF WASHINGTON
Dixy Lee Ray
Governor

DEPARTMENT OF GAME
600 North Capitol Way, GJ 11 Olympia, WA 98504 206 753 5700

January 12, 1981

Mr. Glen Fiedler
Assistant Director, Water Programs
Department of Ecology
Olympia, Washington 98504

Dear Mr. Fiedler:

29. The Department of Game strongly supports the Kitsap Instream Resources Protection Program. We urge the Department of Ecology to adopt these regulations.

The Kitsap Water Resource Inventory Area has many very small streams which, together, have great significance for fish and wildlife. Even the smallest of these streams, which are easily overlooked by the casual observer, have great importance to wildlife. Because many Kitsap streams are small, they are particularly vulnerable to severe damage and loss of instream resources. Small but valuable streams and their instream resources could be lost almost before they are noticed if the program is not adopted and enforced.

The dependence of Kitsap game fishes upon adequate flow is clear. The number of cutthroat trout smolts that migrate to sea from Big Beef Creek is strongly correlated with the lowest flow during the previous summer and fall. The numbers of steelhead caught by sportsmen from Kitsap streams are correlated with lowest flows in the two years the young steelhead spend in the streams.

Streams which are too small to support salmon and steelhead are all the more important for cutthroat trout, which benefit from lack of competition. The Kitsap area is well known for its recreational fishery for sea-run cutthroat trout. This program, if enforced, should help preserve this valuable resource.

These small streams have microestuaries at their mouths. Each one of these microestuaries is a jewel, a recreational and wildlife resource that enhances the quality of life in the Kitsap area. Stream flow is the lifeblood of these microestuaries.

While stressing the small streams, we don't want to overlook the importance of larger streams. The Union River, Tahuya River, Dewatto River, and Curley Creek together yielded several hundred steelhead to sportsmen last year; sport catch from streams of this basin was comparable to the steelhead catch from the renowned Queets River and much higher than that from the Quinault River.

30. Although we strongly support this program, we would like to have Coulter Creek closed to further consumptive appropriation.

31. Enforcement is an essential part of this program. Partial closures make enforcement difficult. We want to know if the Department of Ecology will enforce this program and, if so, how?

Sincerely,

THE DEPARTMENT OF GAME
Hal A. Beecher
Habitat Management Division

HAB:cv

January 13, 1981

DEPARTMENT OF ECOLOGY
MAIL STOP PV 11
OLYMPIA, WA. 98501

ATTN: GLEN H. FIEDLER, ACTING ASST. DIRECTOR
FOR THE KITSAP WATER RESOURCE INVENTORY AREA (WRIA) 15.

Gentlemen:

On January 8, 1981 I attended the Public meeting at the Purdy Elementary School in Gig Harbor. I expressed some of my concerns about the instream program at the hearing and I have included some of those concerns in this letter.

32. On Page 2 of the November 1980 State Water Program pamphlet titled "WESTERN WASHINGTON INSTREAM RESOURCES PROTECTION PROGRAM", the first answer to the question "will it affect you?" – is so vague it is impossible to tell exactly what the answer says. For example – the statement is made "most ground water (well water) is generally exempt." Such a statement—particularly in the hands of a regulatory
33. bureaucracy – lends itself to total confusion and subjectivity. The question of which ground water is exempt must be dealt with prior to adoption.

34. Another concern I have is exemplified on the last paragraph of Page 25 of the Draft copy of the Instream Protection Program. The title of the paragraph is "Aesthetics and Environmental Values". I understand from the hearing that approximately 570 streams—whether they are year-round or seasonal—were inventoried and cataloged as a part of the WRIA 15. The last sentence of the above referenced paragraph says "the Instream Resources Protection Program will help to preserve the aesthetic qualities and
36. environmental values of streams proposed for closure under the program." If the program seeks to preserve such abstractions as aesthetic qualities and environmental
37. values, then I propose that it is incumbent that the Department of Ecology clearly define not only the meaning of "Aesthetic Qualities and Environmental Values" but also precisely under what conditions would the State involve itself in attempting to regulate under the proposed definitions. Of the 570 approximately streams which were
35. inventoried in WRIA 15, only about 70 were reported to be capable of fish production. It seems to me that it is questionable whether or not the State should be spending taxpayers money on every single or potential stream bed in any area for purposes of attempting to regulate aesthetics and/or environmental values.

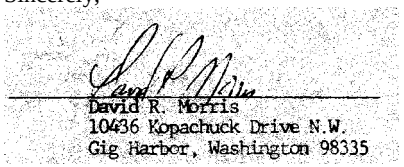
38. Thirdly, I am concerned about the lack of definition and/or location of "Shallow Aquifers". It was stated during the hearing that the State may deny ground water applications if they feel it may draw from a shallow aquifer and therefore have the possibility of affecting the flow of nearby streams within the inventory area.

39. On at least two occasions during the hearing, the unanswered question was asked as to how much taxpayers money had already been spent to this point, and how much was estimated to be spent in the future on the Kitsap Instream Resources Protection Program. It seems as if in this one small area of our State alone—with 570 streams, creeks, and bogs under its jurisdiction—that the State could find itself immersed in a tremendous on-growing and expensive bureaucracy with the impossible mission of not only monitoring the flows and wildlife associated with these waterways, but even more chaotic would be the State's attempt to regulate "aesthetics and environmental qualities."

40. I am in favor of affordable and reasonable protection for fish and wildlife. My perception of the Kitsap Instream Resources Program is that it has the potential of going far beyond the basic goal (as stated in Paragraph two of November pamphlet titled WESTERN WASHINGTON INSTREAM RESOURCES PROTECTION PROGRAM) of protecting "fish and wildlife in rivers and streams."

41. Unless the Department of Ecology can clearly and concisely define "aesthetic and environmental values" so that these terms can be clearly understood as they relate to the Instream Program-by bureaucrats as well as taxpayers—then the proposed administrative rules must be changed to exclude these terms from the jurisdiction of the program. Failure to do so will result in an unmanageable program, incapable of accomplishing its goals, and at GREAT EXPENSE to the TAXPAYERS OF THE STATE OF WASHINGTON.

Sincerely,



David R. Morris
10436 Kopachuck Drive N.W.
Gig Harbor, Washington 98335

cc: Dan Dawson
cc: Art Gallaghan
cc: WETA
cc: South Sound Land Use Assn.

June 1, 1981

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
MAIL STOP PV-11
OLYMPIA, WA. 98504

ATTN: GLEN H. FIEDLER

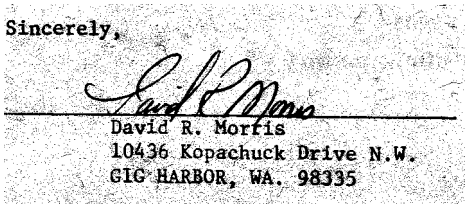
RE: PUBLIC COMMENT – KITSAP INSTREAM RESOURCES PROTECTION PROGRAM

Dear Mr. Fiedler:

On March 30, 1981 I directed a letter to you and requested a response (copy of letter enclosed).

Since it is now June 1st, may I please hear from you in the near future – hopefully long before you intend to proceed with adoption.

Sincerely,



David R. Morris
10436 Kopachuck Drive N.W.
GIG HARBOR, WA. 98335

cc: Representative Dan Dawson

March 30, 1981

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
MAIL STOP PV-11
OLYMPIA, WA. 98504

ATTN: GLEN H. FIEDLER

RE: PUBLIC COMMENT – KITSAP INSTREAM RESOURCES PROTECTION PROGRAM

Dear Mr. Fiedler:

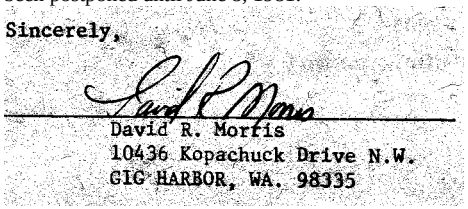
Thank you for your letter dated February 17, 1981 which was a response to my concerns regarding the Kitsap Instream Program. I remain as concerned as ever about the questions which I raised in my original letter. First of all, I am concerned about the State's granting of exemptions for aquifers on a case by case basis when there is apparently questionable or non-existent data regarding aquifers which should or should not be exempt.

Secondly, even though you have carefully defined "aesthetic qualities" and "environmental values" on page two of your letter, I still question whether these definitions are sufficient to allow the Department of Ecology to make consistent determinations on specific land use applications where the interpretation of these terms becomes a focal point of permit approval or denial. In short, I feel that just because the Department of Ecology has its own definitions available, one cannot conclude that decisions based on these definitions will be consistent. For example, you have defined "environmental values" as the quality of the biological chemical, and physical factors to which organisms, including human beings, are exposed. How would you or your staff interpret this definition while reviewing a permit application?

In one of the final paragraphs of your letter you indicated that the total cost to the State of Washington for the Kitsap Instream Program was $13,064.00. As a concerned taxpayer I would like to know what portion of these funds represents labor/hours. I would appreciate hearing from you as to whether or not the figure did include labor and if so, how do you calculate labor/hours in giving budget costs or forecasts on programs such as this?

I will appreciate hearing from you as soon as possible. I understand the adoption proceedings have been postponed until June 8, 1981.

Sincerely,



David R. Morris
10436 Kopachuck Drive N.W.
GIG HARBOR, WA. 98335

cc: Representative Dan Dawson
cc: Senator Art Gallaghan

J

McCLUSKEY, PINCKNEY, SELLS, RYAN & RIEHL, Inc. P.S.

rry K. McCluskey
ald R. Pinckney
es K. Sells
es E. Ryan
ames M. Riehl

Karen B. Conley
Simon Peter Olbertz
M. Evelynn Heberly
Roy A.M. Rainey

January 14, 1981

State of Washington
Dept. of Ecology
Water Resources Policy Development Section
Olympia, WA 98504

Attn: Hearings officer

RE: Instream Resource Protection Program/Kitsap Water Resource Inventory Area/Proposed Administrative Rules

Dear Sir:

42. I am the attorney for the Kitsap Golf and Country Club which lies along the lower levels of Chico Creek in Kitsap County. My client has been considering constructing a well and retaining pond in the vicinity of Chico Creek on it's property. This has been under consideration for some time, but the organization recently assessed it's membership in an attempt to raise the funds necessary to dig the well. I am writing on their behalf to determine what effect, if any, the Proposed Administrative Rules referred to above would have on their plans for digging this well in the neighborhood of Chico Creek.

I would appreciate any explanation you might have as to the effect before adoption of the Proposed Rules.

Very truly yours,

McCLUSKEY, PINCKNEY, SELLS, RYAN & RIEHL, INC. P.S.

RONALD R. PINCKNEY

RRP/wab

cc: Paul McConkey
President of Kitsap Golf and Country Club

_____510 Washington Avenue, Bremerton, WA (206) 479-4545

K

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
2625 Parkmont Lane, S.W., Bldg. B-3
Olympia, WA 98502

January 15, 1981

Mr. Glen Fiedler
Assistant Director, Water Programs
Department of Ecology
Olympia, WA 98504

Dear Mr. Fiedler:

43. Although we were not actively involved in its development, the Fish and Wildlife Service strongly supports the Kitsap Instream Resources Protection Program. The adoption and enforcement of your proposed regulations should help protect the high actual and potential fish and wildlife resource values of the basin's many streams.

Sincerely,

Charles A. Dunn
Field Supervisor

cc: WDF (Zillges)
WDG (Beecher)
Point No Point Treaty Council
Suquamish Tribe

PSCOG Puget Sound Council of Governments

January 15, 1981

John Spencer, Acting Director
Department of Ecology MS PV-11
Olympia, WA 98504

ATTENTION: Jeanne Holloman, Program Planner

Re: Draft report, "Instream Resources Protection Program for the Kitsap Water Resources Inventory Area (WRIA) 15 Including Proposed Administrative Rules"

Dear Ms. Holloman:

The Kitsap Subregional Council and staff have reviewed the proposed instream program for the Kitsap WRIA 15 and request that DOE provide answers to the following sequential questions to assist the Subregional Council and its member-jurisdictions in studying the proposed WAC rules associated with the program.

1) Seventy-four percent of the water purveyors in the Kitsap countywide area draw exclusively from groundwater for their supply of water. This 74% of the purveyors provides 40% of the water used on an average day. (The latter figure drops to 26% if the deep wells at Fletcher Bay and on the Trident Submarine Base are not included.) Because of the strong possibility that Kitsap's groundwater and streams are interconnected (that "hydraulic continuity" exists), will the instream program effectively define the locations for where new wells may and may not be drilled?

44.

2) Will the drillers of new wells have the burden of proof in establishing that a new well will not adversely effect surrounding streams?

45.

3) The various water purveyors in Kitsap County are described in the instream report as generally having sufficient water supplies to meet increasing demand through 1990 except for Bainbridge Island (which is closer to the point of using all known water supplies at the present time). In the period between 1980 and 1990, the population of the Kitsap countywide area is projected to grow 17% according to the instream report (and 23% according to PSCOG). Short-term increases in water demand from now to 1990 will likely draw

46.

heavily from additional groundwater withdrawals. Given the "hydraulic continuity" in Kitsap, will the instream program affect groundwater to the extent of influencing the 1990 timetable? For example, will the 1990 date need to be moved up due to the instream program?

4) The proposed instream rules do not list any streams on Bainbridge Island for limited stream flows, or for partial or complete stream or spring closures. Can we assume that this means the instream program will have the effect of "no change" on the water supply situation for that Island?

47.

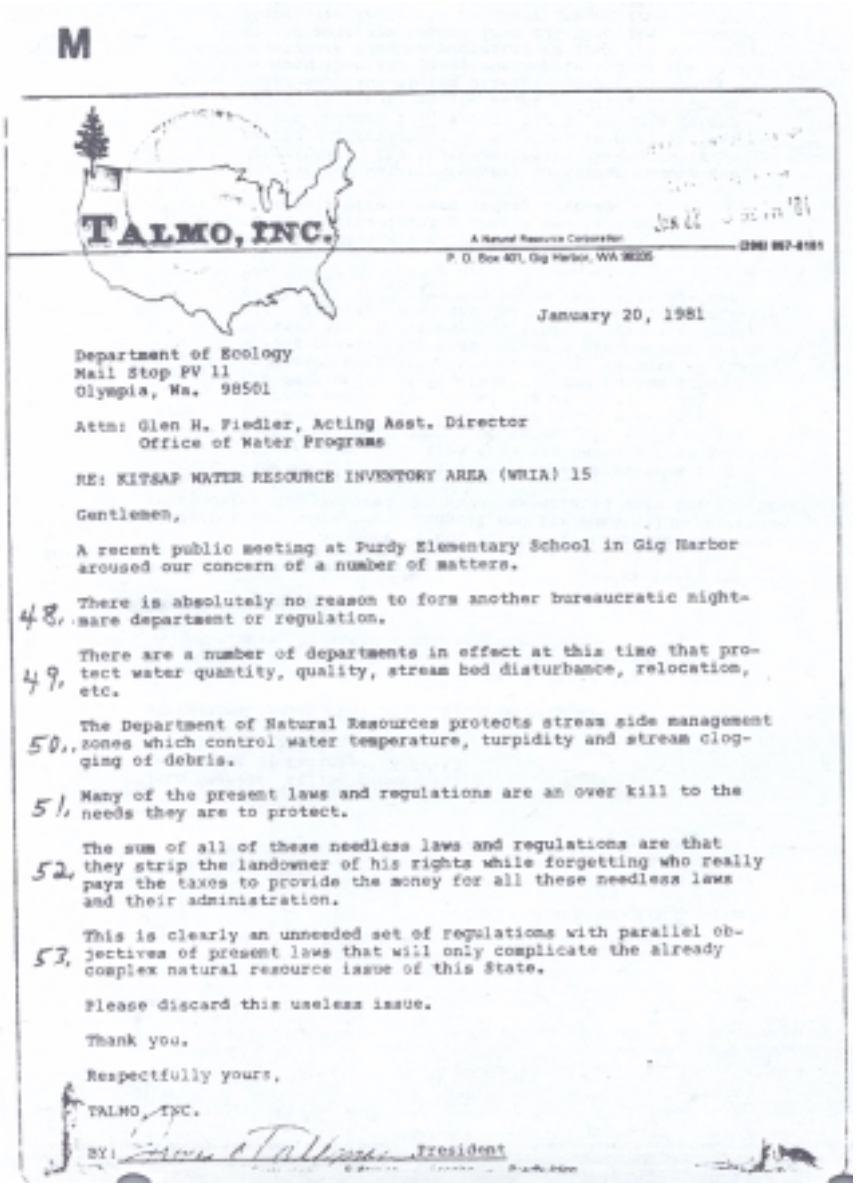
Sincerely,

Alice P. Tawresey

Mayor Alice Tawresey, Chairman
Kitsap Subregional Council

cc: Class 1 water purveyors in Kitsap County

M



TALMO, INC.

A Natural Resource Corporation
P. O. Box 401, Gig Harbor, WA 98335
(206) 857-6161

January 20, 1981

Department of Ecology
Mail Stop PV 11
Olympia, Wa. 98501

Attn: Glen H. Fiedler, Acting Asst. Director
Office of Water Programs

RE: KITSAP WATER RESOURCE INVENTORY AREA (WRIA) 15

Gentlemen,

A recent public meeting at Purdy Elementary School in Gig Harbor aroused our concern of a number of matters.

48. There is absolutely no reason to form another bureaucratic nightmare department or regulation.

49. There are a number of departments in effect at this time that protect water quantity, quality, stream bed disturbance, relocation, etc.

50. The Department of Natural Resources protects stream side management zones which control water temperature, turpidity and stream clogging of debris.

51. Many of the present laws and regulations are an over kill to the needs they are to protect.

52. The sum of all of these needless laws and regulations are that they strip the landowner of his rights while forgetting who really pays the taxes to provide the money for all these needless laws and their administration.

53. This is clearly an unneeded set of regulations with parallel objectives of present laws that will only complicate the already complex natural resource issue of this State.

Please discard this useless issue.

Thank you.

Respectfully yours,

TALMO, INC.

BY: [signature] President

N

Washington Environmental Council

107 South Main Street
Seattle, Washington 98104
206-623-1483

54.

January 23, 1981

Jane Wallace
Department of Ecology
Water Resources Division
Olympia, WA 98504

Re: Kitsap Instream Resources Protection Program

Dear Ms. Wallace,

The Washington Environmental Council endorses your proposed Kitsap Instream Resources Protection Program, and urges you to adopt the regulations without relaxing the closures or minimum flow levels in the draft program.

We are concerned that the fisheries resources of Washington State will be further diminished if actions such as this program are not taken.

We trust that measures to ensure the enforcement of the program will be taken.

Sincerely,

[signature]

Roger Leed, President
Washington Environmental Council

DEDICATED TO THE PROMOTION OF CITIZEN LEGISLATIVE AND ADMINISTRATIVE ACTION TOWARD PROVIDING A BETTER ENVIRONMENT

O

UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON 98195

College of Fisheries
Fisheries Research Institute

January 22, 1981

Ms. Jeanne Holloman
Program Planner
Dept. of Ecology PV11
Olympia, WA 98504

Dear Ms. Holloman:

In reference to the proposed Instream Resources Protection Program for the Kitsap Water Resource Inventory Areas (WRIA) 15, we have some comments for your consideration.

55. The University of Washington, College of Fisheries, owns 290 acres at the mouth of Big Beef Creek (#121) and the Fisheries Research Institute has operated a fisheries research station at this site since 1966. Our fisheries research has been primarily concerned with salmonid production strategies in the stream, spawning channel and hatchery environments. More recently in cooperation with the Washington Department of Fisheries we have been expanding our research to all areas of the Big Beef Creek watershed and results from these studies have indicated a need for the proposed instream resource protection program (see corrections p. 17).

The following may be included under your section on Fish on p. 24:

> 56. The University of Washington, College of Fisheries, operates the Big Beef Creek Fish Research Station on 290 acres at the mouth of Big Beef Creek. Fisheries research has been conducted since 1966 on the production of salmonids in spawning channels, hatchery and stream environments.

An additional paragraph concerning the Big Beef Creek station that could be included in the water availability section on p. 28 is suggested:

> 57. The University of Washington and U.S. Fish and Wildlife Service have completed an exploratory aquifer testing program to determine if sufficient water resources are available to establish a regional interagency fisheries research center at the Big Beef Creek Fish Research Station. The exploratory program revealed several deep aquifers and a production well was developed and pump tested at 2000 gpm or 2.2 cfs.

58. One of our concerns on the Big Beef Creek watershed is the operation of the Lake Symington dam. During the summer stream flows are not sufficient to keep the dam full. Specific regulations are needed for the operation of the overflow system during the closed period May 15 to November 1 to ensure correct operation of the spillway tube. If stream flows of 15 cfs are maintained throughout the 6.5 month closed period, then Lake Symington will be drawn down each summer, which is undesirable for local residences. Sediment transport and loss of water from evaporation are also problems.

59. We request the closure of Stavis Creek #113 from June to November 1. Stream surveys have shown a water regime similar to Big Beef Creek. Stavis Creek salmonid stocks have been decreasing at a greater rate than the Big Beef stocks and we feel that this stream warrants protection.

60. It is not clear how the stream flow levels are derived for the closed periods. For example, Big Beef Creek will not have 15 cfs of water available during the summer even if Lake Symington were drawn down (USGS records). How was 15 cfs determined for Big Beef?

We thank you for the opportunity to comment on the Instream Resources Protection Program.

Sincerely yours,

Dr. R. L. Burgner, Director
Fisheries Research Institute

Mr. B. P. Snyder, Station Manager
Big Beef Creek Fish Research Station

Dr. E. O. Salo, Director
Big Beef Creek Fish Research Station

RLB/BPS/EOS:cs

P

Dept. of Ecology,
Water Resources
Olympia, Wa 9504

Attn.: Jeanne Holloman
Project Planner
Re.: Instream Resources Protection
Program – Draft

I have just read the Draft of the Program and would like to express my concerns regarding it.

61. 1) There is continual reference to "shallow aquifers" but no definition of the term. This is a serious omission.

62. 2) It appears that much of the data on which the Draft was based is out of date and insufficient:

63. Page 23 – Deep Wells: I think the statements and concerns stated in this paragraph are erronious and without supporting evidence. Up to date information would tend to disprove much of this paragraph. I feel that "concerns . . . expressed by others" without evidence to support such concerns is out of place in a document such as this.

64. Page 23 – Shallow Drilled Wells: There are many good wells deeper than the range stated.

65. Page 30 – Pierce County's Comp. Water Supply Study: The study is seriously out of date, in fact the study was questionable when new. Present information indicates that we have a far greater supply than indicated in that study.

66. 3) The protection of the Resource is valid and necessary but should be accomplished with minor amending of present laws and regulations and a minimum of staff increase.

67. 4) The goal of the program being "preservation of fish and wildlife, maintenance of water quality, navigation" appear to be clear controllable concerns and goals. BUT when you add "recreation, aesthetic and other environmental values" you have added a catch all phrase which allows ANY concern expressed to have validity, regardless how insignificant it may be or how costly its remedy.

Sincerely,
Paul Garrison
Paul Garrison
P. O. Box 527
Gig Harbor, Wa. 98335

cc: Dan Dawson
Barbara Granlund

Q

Harbor Water Co.
P.O. Box 336 – GIG HARBOR, WASHINGTON 98335 – PHONE 858-9460

January 26, 1981

Jeanne Holloman, Program Planner

RE: Draft report, "Instream Resources Protection Program for the Kitsap Water Resources Inventory Area (WRIA) 15, Including Proposed Administrative Rules

Dear Ms. Holloman:

68. AS a Washington State public water purveyor under approval of the Washington State Department of Social and Health Services, the Washington State Department of Ecology and regulation by the Washington State Utilities and Transportation Commission; I am greatly concerned with water availability for sufficient potable water for domestic use and also sufficient water for fire flows required by both state and county regulations.

69. First, I cannot find a proper definition of "Shallow Ground Water Aquifers". Does this mean water below a "confining strata", or only waters which lie between the land surface and the 1st "confining strata" (hard-pan, clay, etc.)?

70. The statement that we, the purveyors will have sufficient water through 1990 is and interesting statement. On what facts are you basing your population projections and water availability questimates. What then after 1990 is supposed to be done in order to continue supplying water for domestic and fire flow use? Are not these public health and safety requirements of more importance than "scenic, aesthitic or environmental values

71. of the streams in the area"?

72. I find questionable data used for projections on stream flows which was obtained from an inventory done in a three year period survey from 1965 to 1968. Stream flows in the intervening 12 to 15 years have undoubtedly already been altered appreciably by man and nature.

73. Regulations and laws require that a "public water purveyor" continuously supply water to their service areas. By leaving open the possibility of stream closures for aesthetic or environmental values you would be jeopardizing public water supplies for domestic and fire flow uses.

Thank you for the opportunity to comment on these concerns.

Sincerely,
Barbara P. Wiles
Barbara P. Wiles,
President

R

27 January 1981

Kitsap Audubon Society

POST OFFICE BOX 941 POULSBO, WASHINGTON 98370

Ms. Jeanne Holloman
Washington Department of Ecology
Lacey, Washington 98504

Ms. Holloman,

74. Kitsap Audubon Society has reviewed the Instream Resources Protection Program for Kitsap Water Resource Inventory Area 15. We strongly support this program and urge the Department of Ecology to adopt these regulations. In addition we have reviewed comments from the Washington Game Department presented to the Department of Ecology and urge your support of Dr. Hal Beecher's recommendations. In particular, we
75. support the Game Department requests for minimum flows and suggest that Coulter Creek be closed to further consumptive appropriations. We also recommend closures for streams included as Significant Natural Areas of Kitsap County as discussed below.

The Kitsap Instream Program is of special concern to stream resources, the people of the county, and the recent activities of the Audubon Society. In response to accelerating population pressures, the Society has recently begun an inventory of local Significant Natural Areas. This project involves the identification of sensitive environments, mapping and describing them, and promoting guidelines for maintaining these vital natural communities. We have completed an inventory of North Kitsap County and have
76. presented the information to the Kitsap County Department of Community Development. The enclosed document is the text portion of the North Kitsap effort. Along with maps of the areas, this set of sites and guidelines are now a part of the County's Planning efforts for environmentally sensitive areas. We were pleased to see that your concerns for streams included the broad range of environmental benefits provided by our water resources. These benefits are recognized in the County's Comprehensive Plan and are at the base of our cooperative efforts to preserve the quality of natural communities in Kitsap County.

Streams have received considerable attention in our planning efforts and you will note our identification of several as Significant Natural Areas. These streams are listed in the enclosed list of sites according to WRIA number. Hopefully this will not cause confusion in cross-referencing to your number system. Supportive biological
77. information is included for some streams and we continue to gather information for these sites and for those with no baseline information. Information is also being put together for the remainder of the county and we hope to move on to Mason County. We will send copies of these updates to you as completed and trust you will consider including any additional streams identified as Significant in future recommendations for protective closures.

Again, we appreciate the efforts to extend protective closures to the Streams of Kitsap Water Resource Inventory Area 15. These streams support commercially and recreationally valuable fish and other wildlife. They also form a vital prtion of a network of streams, beaver pond and marsh systems that are being destroyed by rapid land use changes in our area. We support measures which extend necessary protection to environmentally sensitive areas and hope to work with you in future efforts. Please let us know if we can be on further assistance.

Sincerely,

Hon Hirschi
Kitsap Audubon Society, Conservation Committee
9950 SW Lakeness
Poulsbo, Washington 98370

S

POINT NO POINT TREATY COUNCIL
P.O. Box 149 Kingston, Washington 98346 Ph. 297-9489

January 27, 1981

Ms. Jeanne Holloman
Program Planner
Department of Ecology
Mail Stop PV 11
Olympia, WA 98504

Dear Ms. Holloman,

The Point No Point Treaty Council submits the following as written comments on the Instream Resources Protection Program for the Kitsap Water Resource Inventory Area (WRIA) 15. An oral statement was given on behalf of the PNPTC at the Public Hearing at Bremerton on January 7, 1981 and we have reviewed the (draft) proposed administrative rules.

In general we support the proposed rules and the inclusion of at least the following streams, with a mean annual flow of 5 c.f.s. or less. (New Surface Water Closures) for closure year-round to further consumptive appropriation. These include: #13, #18, #31, #34, #46, #50, #52, #54, #55, #56, #101, #164. All of these are tributary to Hood Canal waters.

78.

Of the following rivers, all have had instream flows established and all but two are proposed to be closed at least a portion of the year.

River	Closure
#7 Union (from mouth to McKenna Falls)	All year
#44 Tahuya	6/15-10/15
#60 Rendsland	All year
#70 Dewatto	6/15-11/1
#96 Anderson	None
#113 Stavis	None
#121 Big Beef Creek	5/15-11/1
#124 Anderson	6/1-11/1

We feel that #96, Anderson Creek and #113, Stavis Creek should be closed to further consumptive use at least during a portion of the year, during the low flow period of July to October, such as between July 1 and October 15. However, we support the proposed instream flows and corresponding closures.

79.

The following rivers have been previously closed and we support the maintenance of their status as such. This list is not inclusive but includes those rivers tributary to Hood Canal waters.

Stream Name and Number	Date of Original Closure
#12 Mission Creek and tribs.	12-5-51
#57 Unnamed stream and tribs.	11-3-48
#117 Seabeck Creek and tribs.	8-27-54
#158 Unnamed (Gamble Creek/Christiansen Cr.) and tribs.	8-15-75
Mission Lake and tribs.	7-19-78

If you feel you must state plans for the use of the Skokomish River and/or any other eastern Olympic Peninsula river to meet future Kitsap County water supply needs, you should also state that such plans will, most certainly be opposed by the Skokomish Tribe and Port Gamble Klallam Tribe.

80.

The Tribe is located at the mouth of the Skokomish river and is very dependent on the fishery resource in Hood Canal. There is plenty of legal precedent for the Tribe to resist the mentioned plan in the future.

Thank you for the opportunity to submit these comments. If you need clarification on our position or if you have any questions, please contact myself or Heidi Rooks, biologist.

Sincerely,

Gary W. Peterson
Commissioner
Point No Point Treaty Council

GWP/ms

T

Area Code (206)
508-3311

THE SUQUAMISH TRIBE

P.O. Box 498 Suquamish, Washington 98392

January 28, 1981

Ms. Jeanne Holloman, Program Planner
Kitsap Instream Resources
Protection Program
Department of Ecology
Mail Stop PV-11
Olympia, WA 98504

Dear Ms. Holloman:

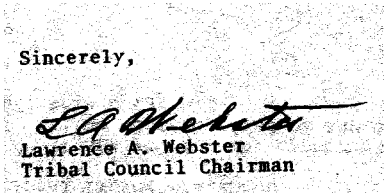
81. The Suquamish Tribe commends the Department of Ecology for the considerable effort put into the Instream Resources Protection Program for Kitsap Water Resources Inventory Area (WRIA) 15. The need to protect and provide adequate instream water flow for the benefit of native fish and wildlife becomes more urgent with increasing Kitsap County urbanization.

82. The Suquamish Tribe requested closure of Grovers Creek (WRIA #192) and Gorst Creek (WRIA #268), along with several other streams, in a letter to the Department of Ecology dated February 29, 1980 and at a public hearing held in the Bremerton City Hall Council Chambers on January 7, 1981. Unfortunately, while DOE accepted most of our recommendations for stream closures, those for Grovers and Gorst Creeks were not included in the December 1980 Draft Instream Resources Protection Program. The Tribe believes that failure to close Grovers all-year and Gorst Creek during the critical half year period will result in serious impacts to the fishery resources, particularly in view of the new salmon hatchery located near the mouth of Grovers Creek and a developing coho fry plant program for Gorst Creek. A total closure of Grovers Creek and a partial closure of Gorst Creek during summer low flow periods will significantly protect the fishery resources of these streams.

83. The Suquamish Tribe believes the intent of WAC 173-515-050 Groundwater (New Section) is meritorious but lacks mechanisms to quantitate any impacts caused by groundwater withdrawals to surface water flow. Kitsap County streams depend on groundwater fed springs to maintain summer low flow levels. Therefore, there is a high potential for future groundwater withdrawals to impact closed streams in Kitsap County and may require reduction or termination of those specific groundwater withdrawals in accordance with WAC 173-515-050.

The Suquamish Tribe appreciates the opportunity to provide input into this very important program. We will continue to work with the Department of Ecology to help insure the longterm success of the Instream Resources Protection Program for Kitsap WRIA 15.

Sincerely,



Lawrence A. Webster
Tribal Council Chairman

LAW/PRD/tgm

U

HOOD CANAL ENVIRONMENTAL COUNCIL

January 28, 1981

Washington State Dept. of Ecology
Water Resources Division
Olympia, WA 98504

Subject: Kitsap Water Resource Inventory Area 15

Friends:

84. Our organization is totally in agreement with the objectives of the Western Washington Instream Resources Protection Program. In order to protect fish and wildlife and water quality of the streams flowing into Hood Canal there is need for the setting of instream flows and limitation of water removal from these streams.

We have felt this needed to be done for some time and urge adoption of the proposed regulations.

Sincerely,

Hood Canal Environmental Council
Irene Davis
Board Member

V

Fed
Dick-Tracy associates inc.
PLANNING CONSULTANTS
(206) 876-8534 • 2505 SE Hwy 160 • Port Orchard, WA 98366

February 3, 1981

Mr. Eugene Wallace
Water Resources Management
Department of Ecology
Olympia, WA 98504

Dear Mr. Wallace:

85. You will find enclosed my comments on the Instream Resources Protection Program. The comments are directed particularly at the Kitsap Water Resource Inventory Area (WRIA) 15, although many of them pertain to the overall Western Washington program and the accompanying Final Environmental Impact Statement.

DICK-TRACY ASSOCIATES, INC.
Michael R. McCormick
Associate

Thank you for the opportunity to comment. I hope that I will be kept apprised of any changes to, and the progress of, this program.

Sincerely,

MRMC/sc
encl.

ENVIRONMENTAL ANALYSIS SITE DESIGN GOVERNMENTAL LIAISON

ATTACHMENT

We have reviewed the Draft Instream Resources Protection Program – Kitsap Water Resource Inventory Area (WRIA) 15 and the Final Environmental Impact Statement for the Western Washington Instream Resources Protection Program. A number of significant questions and comments have arisen as a result of this review. These comments can be classed in three major areas:

1) Program Basis;
2) Program Effects; and,
3) Adequacy of the Environmental Impact Statement.

We believe that prior to the adoption of this program, a full clarification and public discussion of these issues must occur.

Program Basis

86. In reviewing the program documents, there appears to be a continual lack of a substantive reply to the question "Why this program at this time?" This question has been repeatedly posed by major commentors on Draft and Final Environmental Statements, including the Cities of Seattle and Tacoma and Public Utility Districts.

87. Since DOE admits lack of information (by DOE), or use of doubtful
88. information, the establishment of minimum flows and abrogation of future water rights is certainly arbitrary and capricious for certain of the streams in this basin. This position
89. is reinforced by the fact that the Department of Ecology is, through its current authority under law (RCW 75.20, 90.22 and 90.54), able to refuse permits to divert water, thus protecting a minimum flow for the stream.

90. The Department appears to have elevated and protection of minimum flows in streams that are "significant for fish and wildlife habitat" to the highest priority for allocation of waters under the Water Resources Act. What methodology was used to determine that this priority is consistent with the intent of RCW 90.54.020(2)? There has
91 been no mention of, let alone evidence of, a cost/benefit analysis in any of the program documents or hearings.

92. As stated in RCW 90.54.040(3), the Department is to review statutes relating to water resources. When these statutes appear to be ambiguous, the Department "shall make recommendations to the legislation including appropriate proposals for statutory modifications or additions". There is no evidence that the Department has done this in order to clear up any ambiguities regarding the prioritization of uses of the water resources; has this in fact been done? Has there been a legislative statement of priority which supersedes RCW 90.54.020, and particularly the method of allocation in sub-section (2)?

93. This line of questioning is not to denigrate the purpose of utilizing the water resources of Washington for fish and wildlife enhancement; this is a beneficial use of the water resource. However, so are uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, recreational, and thermal power production uses, as well as environmental and aesthetic values and all other uses compatible with the enjoyment of the public waters of the State (RCW 90.54.020). It is explicitly stated how waters are to be allocated; it remains to be
94. seen whether this method has been used in the creation of this unsubstantiated and costly administrative program.

95. 96.

Program Effects

97. The expected effectiveness of this program is not documented at any place throughout the program proposal. Again, this points to the lack of information on which this program is based. Is there reason to believe that based on additional information the low flow requirements will be modified or removed? Will there be a monitoring program designed to measure the program's effectiveness in protecting the fish resource? If so, will there be periodic reports on this program?

98. The effect of this program on local land use planning is potentially great. Although individual wells would be allowed, public water systems serving even a small number of homes will be prohibited. This will preclude any development (which shares water supply for cost and resource efficiency) in these stream basins. Is this an indication that the Department intends to preempt local government in the land use regulation business? What method is to be used to reconcile any differences between
99. this program and a local plan which allows for (or even encourages) development in those locations?

100 How will public water providers procure their water in basins where stream flows are limited? Obviously, there is a relationship between groundwater and surface water. The proposed administrative rules include WAC 173-515-050:

> "GROUNDWATER. Future groundwater withdrawal proposals will not be affected by this chapter unless it is determined that such withdrawal would clearly have an adverse impact upon the surface water system contrary to the intent and objectives of this chapter."

101. If this proposed rule is interpreted strictly, the use of wells will be absolutely precluded. Has a methodology for determining the relationship of surface water/ groundwater been calculated by the Department? Has this method been made public? At what time does the allocation of water to public water suppliers become more important than the maintenance of instream flows? How will this prioritization be determined? Rather than using groundwater for their supplies, is DOE creating regulations which will force the public water suppliers to go elsewhere for their water? What coordinated efforts has DOE undertaken with the involved counties, cities, and public utility districts on this point.

106. In this energy-short time, a new examination of the potential for low-head hydropower is underway. What effect will this program have on these efforts? Do these low flow restrictions prevent streams or rivers from having low-head hydropower facilities? Has a serious discussion of the relative merits of low-head hydropower vs. fisheries enhancement occurred?

107. As can be seen from the previous questions and discussion, this program will have serious effects on a range of issues from local land use planning to the future provision of public water supplies and energy. Prior to the adoption of this program, further discussions should be undertaken in order to resolve these issues, and this discussion, we believe, should be based in the legislative process.

Adequacy of the Environmental Impact Statement

108. As well as questions on the program itself, a variety of queries arise on the adequacy of the Environmental Impact Statement. These comments are directed at the Final Environmental Impact Statement; a Draft E.I.S. was not available for review.

The Final E.I.S. is a programmatic document describing impacts on a general level. This level of analysis is not sufficient to describe the impacts that each basin program will cause. Specific impacts resulting from this program will differ from basin to basin; these must be addressed at a greater level of detail than has been done. There is very little information in the F.E.I.S. which can be used to evaluate the environmental impacts of a specific basin program. A Supplemental E.I.S. should be prepared for each basin, discussing the specific impacts within that basin.

The preparers of the E.I.S. have erred in two ways: 1) inappropriately overusing the "Non-Applicable (N/A)" designation so that pertinent environmental elements are not analyzed; and, 2) failing to provide an adequate discussion of impacts in certain other elements.

109 The list of elements which were designated "N/A" is lengthy; certain of these are clearly impacted by this program. There is a clear impact on Public Utilities; particularly, with regard to Water and Energy. This program will have significant impacts on any utility's plan to create hydropower projects or water supply projects on any of the affected rivers or streams. Because of the relationship between groundwater and surface waters, there is also a major impact on a utility's ability to provide public water supplies through the use of large wells. All applicable information should be made available so that a full public discussion of the alternative uses of these waters can take place. A third category which was not discussed is the Housing element. This program, through its restrictions on the use of water, will have a significant effect on housing patterns. This issue also merits discussion in the E.I.S.

113 Other environmental elements were inadequately analyzed in the E.I.S. The proposal, a basin program, should be analyzed to determine its consistency with the comprehensive land use plans and zoning codes; because the E.I.S. is programmatic, and not basin-specific, this is not adequately carried out. In fact, no discussion of the program's relationship to any Comprehensive Plan or zoning Code exists.

114 A very limited discussion of this program's impact on Land Use is included. What land use patterns will occur if the only water supplies in an area can come from individual wells pumping less than 5000 G.P.D.? What are the indirect implications on other nearby lands if development restricted by this program? This section addresses neither the direct or indirect implications of this program on future land use patterns. Again, a basin-level E.I.S. is required to perform this task adequately.

115 "Under the State Economic Policy Act, an economic analysis will be conducted for each regulation." (F.E.I.S., p.6). Yet, this requirement is not carried out. This must be done, both for this requirement, as well as a part of determining the net
116 benefits and costs of this program (RCW 94.50.020(2)).

117 There is an inadequate analysis and discussion of the requirement under WAC 197-10-440(9) and (10), Relationship Between Short-Term Uses of Man's Environment and Maintenance and Enhancement of Long-Term Productivity – Irreversible or Irretrievable Commitments of Resources. Apparently, no analysis of the benefits and disadvantages of reserving the implementation of the program for some future time (sub-section (b)) was undertaken, as there is no discussion of this requirement. Under (b.ii.) it is required that "particular attention should be given to possibility of foreclosing future options or alternatives by implementation of this program"; no attention is paid to this item. Again, if this program were examined by basin, it would be more likely that this analysis could be undertaken with some certainty.

Section 10.(a) requires that an identification of natural resources, including energy and non-renewable materials, which will be committed by the program. This includes "the lost opportunities to make other uses of the resources in question". This
118. would require that some discussion, at some point in the E.I.S., take place on the issue of low-head hydropower for the provision of energy and public water supplies. This issue may also be addressed more easily if a Supplemental E.I.S. is prepared for each basin.

There is one final point regarding the adequacy of the E.I.S. For the review, I also wished to examine the Draft E.I.S. to evaluate the changes between it and the F.E.I.S. However, the last copy of the D.E.I.S. had apparently been discarded by the
119. Department. Without this information, a thorough evaluation of the program and its impacts cannot be made.

Conclusions

This program should not be implemented at this time at the scale that it is proposed. Although low-flow restrictions are certainly applicable on some streams, these should be applied on an individual basis, and not as a part of a general
120. administrative program. The questions raised in this letter and others must be responded to prior to the adoption of this program. Grave doubts as to whether this program meets the requirements of the Water Resources Act of 1971 exist; until these are clarified, it
121. must not be implemented.

A thorough analysis of the effects of the program has not been undertaken. No comparison of the utilization of water resources for other uses as listed in the Water Resources Act has been carried out by the Department. Apparently, no cost/benefit analysis has been performed which would indicate that this program provides the
122. "maximum net benefits for the people of the State".

Not only has this analysis not been performed, but the evaluation of this program under the State Environmental Policy Act (SEPA, RCW 43.21C, WAC 197-10) is inadequate and plagued with errors. Analysis at a programmatic level does not begin to address the specific impacts within each basin. Errors in analysis, the inappropriate use of the "N/A" designation, and the lack of fulfilling the requirements of WAC 197-10-440, Contents of a Draft E.I.S., nullify the validity of the Environmental Statement.
123. Additional work must be performed prior to any adoption of this program. We would strongly urge that a Supplemental E.I.S. be prepared for each basin, so that an informed decision based on factual information can be made regarding any restrictions on stream flows. This information could then be used to work with local jurisdictions in order to propose a program which more clearly meets the needs of the people of Washington.

W

January 30, 1981

CERTIFIED—RETURN RECEIPT REQUESTED
= =

Donald M Moos, Director
Washington State Department of
Ecology
Saint Martin College Campus
Olympia, Washington 98504

Dear Mr. Moos:

124. The purpose of this letter is to forward to you my comments on the proposed rules for the Instream Resources Protection Program Kitsap Water Resources Inventory Area (WRIA) 15 and to alert you to my fundamental concern with the resource management of Coulter Creek, one of the streams governed by those rules. Enclosed, please find these comments and attachments thereto.

Prior to 1979, the Coulter Creek Basin surface and ground waters were basically unappropriated. Since then your department has granted to one user, the Department of Fisheries, through water rights and these proposed regulations the vast majority of the water in this virgin basin. These actions place any future water uses in jeopardy and circumvent sound resource management. The Water Resources Act of 1971 addressed the multiple water use concept with which I concur. It appears that the DOE is usurping both the legislative intent of the Water Resources Act of 1971 and local land use decisions.

It appears that the immediate past directors of fisheries and ecology struck an inter-agency deal on water. The commitment of all water resources in the Coulter Creek Basin to fisheries is a prime example of this arrangement. There are those who feel that fish hatcheries and high minimum flows are a “waste” of water. I believe this is harsh because I would think that numerous other water uses are compatible with maintaining the state’s fisheries if given a chance through reasonable compromise.

I am hopeful that the new administration will follow a more rational approach to the water resources and work in concert with property owners, not stonewall them. I am a taxpayer and the third generation owner of property which my family has always endeavored to manage for the interests of future generations as well as our current interests. In that role I am getting rather exercised at the expense (thousands of

dollars) and time required to protect our property rights and future use of our property from overreaching and shortsighted regulation by state government. In the past these landowner concerns have been given the “deep six.” If this trend continues, land ownership will become meaningless, and there will be increasingly less incentive for private property owners like me to strive for sound resource management. When the state controls everything, there is no need for and little interest in private stewardship of the land.

I am therefore requesting for myself and the other major landowners in the Coulter Creek Basin a meeting with your department to resolve our differences at the agency level. We are reasonable, and hopefully we can arrive at a realistic solution.

Please make this letter with enclosures part of the record.

Sincerely,

Peter E. Overton
Post Office Box 2453
Olympia, Washington 98507

Enclosures

cc: Gene Hooker
Gene Wallace
(w/encl.)
Jeanne Holloman
(w/encl.)

CERTIFIED—RETURN RECEIPT REQUESTED
= =

February 2, 1981

MEMORANDUM TO: Donald M. Moos, Director
Washington State Department
of Ecology
Saint Martin College Campus
Olympia, Washington 98504

The enclosed letter is to supplement the comments submitted by Peter Overton on the Instream Resources Protection Program Kitsap Water Resources Inventory Area (WRIA) 15. 125

Peter E. Overton
Post Office Box 2453
Olympia, Washington 98507

Enclosure

cc: Gene Wallace
Gene Hooker
Jeanne Holloman

X

6213 NE 153rd
Bothell, WA 98011
30 January 1981

Mr. Peter Overton
P.O. Box 2453
Olympia
Washington 98507

Dear Mr. Overton:

I wish to point out some errors in Hal Beecher's arguments supporting recommendations by the Department of Game for minimum flows in streams of the Kitsap Water Resources Inventory Area. The arguments were offered in correspondence from Beecher to Jeanne Holloman, Department of Ecology, dated 11 February 1980.

On page 1, para. 1, Beecher purported to test the hypothesis that steelhead production is positively related to low stream flows during the rearing period. In doing so he made several questionable assumptions relating to the applicability of his data and he selected test data in a way which showed a lack of objectivity. The assumptions entail use of single lowest flow to represent low flow, sport catch as an index of the steelhead escapement, and the measured flow pattern in two streams (Dewatto and Big Beef) to repersent the unmeasured flow in another stream (Curley).

I question the use of single lowest flow as an index of low flow when a mean of low flows is more representative. Obviously, the flow on a single day does not determine the steelhead production level for the season.

Beecher's use of the steelhead sport catch in Curley Creek to index the escapement greatly reduces the credibility of his statistical tests. The relationship between sport catch and escapement in small streams is highly variable and an unreliable basis for rigorous statistical testing.

Beecher introduces additional variability and apparent bias into his data by variously using the flows in Dewatto and Big Beef creeks to represent the flow in Curley Creek. The flow regimes of all three creeks undoubtedly are similar—high in winter and low in summer—but to select the lowest flow in Dewatto Creek one year to correlate with age 0 Curley Creek steelhead, and the lowest flow in Big Beef Creek the next year to correlate with age 1 Curley Creek steelhead suggests the data were selected arbitrarily to prove a point rather than to objectively test a hypothesis.

cont'd / . . .

I submit that Beecher's test correlations and probability levels regarding steelhead are unfounded and valueless.

On page 3, para. 4, Beecher cites a highly significant correlation (r = 0.9994) between the number of cutthroat smolts leaving Big Beef Creek and the low rearing flows between 1977 and 1979. These data were not given by Beecher but have been obtained by myself and are shown in the accompanying Table 1 and Figure 1.

Use of these data for correlation with flow is unwarranted because of the low numbers of cutthroat smolts. The combined cutthroat smolt production for all the years being considered equals 1,379, which is slightly more than the average fecundity of a single female cutthroat trout (approx. fecundity range 600-2,300; average ~1,050).

I constructed graphs of these data to check the validity of the high correlation reported by Beecher. Smolt production was compared in these graphs with low rearing flows one and two years previous to outmigration. The second year was included to cover the possibility that cutthroat rear for two years in Big Beef Creek. The graphs show clearly that smolt production and low flow are uncorrelated. No statistical analysis is necessary to prove this.

Beecher concludes from his analysis of Big Beef Creek data that sea-run cutthroat are considerably more sensitive to low flows then are steelhead. I submit that these data in no way support this conclusion.

The way in which these data were mishandled casts considerable doubt on the basis for recommendations by the Department of Game for low flow restrictions in Kitsap area streams. I doubt that there is justification for recommending minimum flows more restrictive than those proposed by the Washington Department of Fisheries for the protection of fisheries resources.

Yours very truly,

Richard W. Tyler

Richard W. Tyler
Fishery Biologist

RWT:as
atts.

Table 1

Salmonid Smolt Production vs. Water flow of Big Beef Creek[1]

Year	Coho	Steelhead	Cutthroat	Mean low flow[2] (lowest daily flow)
1974				15.10 (13.0)
1975		-- Data unreliable--		4.91 (2.7)
1976	34,954	206	60	5.41 (4.7)
1977	37,054	526	367	4.30 (3.0)
1978	1,860	733	560	5.09 (3.5)
1979	45,000	841	102	4.30 (3.2)
1980	20,800	1,679	290	Unavailable

[1]Based on 100 percent-of-flow trapping by Washington Department of Fisheries. Data provided by Messrs. Seiler and Blankenship.

[2]Mean flow of lowest monthly flow. Source: U.S.G.S. hydrologic data.

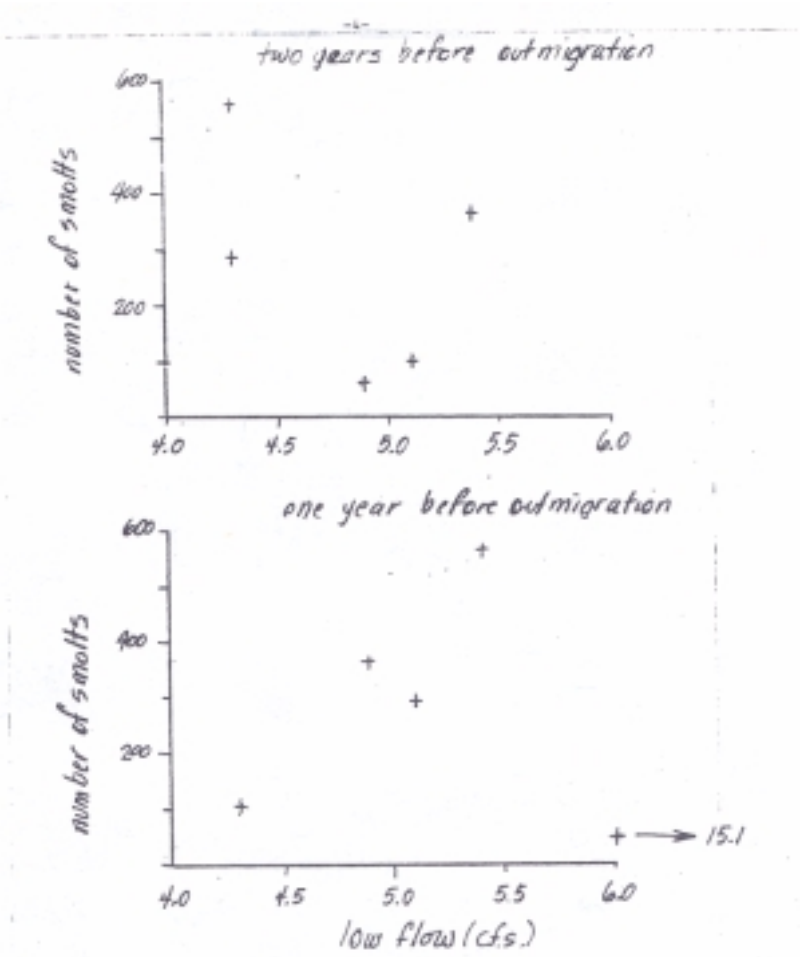


Figure 1

Big Beef Creek cutthroat trout production (1976-80) vs. low stream flows during first and second summers of rearing.

APPENDIX D

RESPONSES TO COMMENTS

I. A. BELFAIR, MASON COUNTY PUBLIC HEARING

Mr. Ed Johnston, Mason County Commissioner

We would like to thank you, Mr. Johnston, for attending the public hearing on the Kitsap Instream Resources Protection Program (I.R.P.P.). It is highly commendable when a public representative participates in governmental procedures as a "voice" for the people whom he represents. Our responses to your concerns follow:

1. We do not agree with your statement that the department is imposing stream closures on a blanket type approach. Apparently, the draft Kitsap I.R.P. Program document does not clearly indicate the thoroughness with which we approach decision-making in the establishment of instream flows or closures. Perhaps the following will help to clarify the process that was followed:

    a. The first step in development of an instream flow program consists of a thorough research and analysis of all existing relevant studies completed to date in a respective water resource inventory area (WRIA). This includes comprehensive land use plans, water supply and sewage plans, geological and hydrological studies water quality studies, and reports concerning anadromous fish utilization of streams, water use and availability, etc. From these studies, the following information is noted or compiled:

        (1) Natural physical features of the study area, i.e., mountains, swamps, rivers, lakes, and man-made features such as, towns, dams, roads, bridges, county lines, municipal boundaries, etc.

        (2) Geology and availability of ground water.

        (3) Current and projected population figures and densities.

        (4) Current and planned land use (and zoning, where the need is indicated).

        (5) Existing and proposed development.

        (6) Existing water supply systems and sources of supply (domestic, municipal and industrial, military, indian, etc.).

        (7) City, county, and other plans for meeting future water supply demands (source, and systems).

        (8) Anadromous fish production in each stream.

    During this first phase of program development, contact is made with local planning departments, public works, energy and municipal water suppliers, irrigators, etc. If proposed development, water, energy, or flood projects are discovered, meetings are scheduled to solicit information to be incorporated in the data base.

The second phase of I.R.P. Program development is the stage in which streams receive individual evaluations and considerations for eventual establishment of instream flows and closures. In order to evaluate the streams, it is necessary to inventory and assess available records on each stream, and to tabulate and compile the information into a usable framework.

(1) An examination is made of DOE records of existing surface water source limitations in order to determine and evaluate the current administrative status of each stream within a water resource inventory area:

- (i) Identification of streams already under low flow or closure restrictions in accordance with Chapter 75.20 RCW, and those currently free of any limitations.
- (ii) Identification of reasons for the original action and recommending agency(ies);
- (iii) The type and extent of DOE investigations at time of request;
- (iv) The type and extent of any litigations that might have occurred;
- (v) Evaluation of the current validity of original conclusions and decisions;
- (vi) Verification of the effective date of closure or instream flow.

(2) Investigation of historical flows of streams within a WRIA for which low flows or closures have not been established, and construction of flow duration hydrographs for each stream. This is done by:

- (i) Obtaining from the U.S. Geological Survey daily streamflow records for each stream for which continuous flow data is available.
- (ii) From this historical flow data, a computer evaluates the statistical characteristics and constructs a discharge duration hydrograph. The hydrograph indicates levels of flow that can be expected in a stream at specific times during the year, and the percent of time those flows can be expected to be exceeded.
- (iii) Streams for which only miscellaneous flow data is available, are correlated with streams having similar characteristics in the same approximate areas that do have adequate flow data. Hydrographs can then be prepared for these additional streams.
- (iv) In the Kitsap WRIA, many small streams with significant instream values have few or no flow measurements. Hydrographs for these streams have been constructed parametrically by evaluating average annual rainfall and basin area, and correlating these characteristics with long-term gaged streams.

(3) Each stream is evaluated by a stream-rating committee, consisting of representatives from six state departments. This information, in combination with discharge duration data, is used to develop hydrological base flows. This information is then used in the further development of proposed instream flows.

(4) Existing water right certificates, permits, and applications on each stream, and the amounts of water permitted, are inventoried from DOE water rights records.

(5) Instream uses are inventoried and evaluated:

(i) The Departments of Fisheries and Game provide biological data on fish and wildlife (including plants) in, and associated with each stream. This includes special habitat information, production figures, historical production and flow data, and recommendations for proposed instream flows and closures.

(ii) Field trips are taken to investigate stream conditions and to take photographs for the record. This is coordinated with DOE regional field staff, who contribute information on historical use and conditions, and issues or conflicts among users.

(6) The Department of Social and Health Services Water Facilities Inventory is examined to identify the major consumptive municipal and industrial water users in a WRIA and the locations, amounts, and sources of those supplies.

c. The third phase of program development consists of coordination meetings and instream flow workshops with other government agencies and the major water users in a water resource inventory area including:

(1) Irrigators

(2) Small domestic water suppliers (2 or more services)

(3) Municipal and industrial water suppliers (cities, towns, water districts, military, Indian tribes, etc.)

(4) Power plant operators (cities, county PUD's, feds, etc.)

(5) Departments of Fisheries and Game

(6) Indian tribes (hatcheries or natural fish production)

(7) Counties and cities

(8) Individual landowners and developers upon their request

(9) Legal representatives of DOE, departments of Fisheries and Game, and Indian tribes, (this could include attorneys for anyone who requested it)

d. As phase four, the department conducts a series of instream flow workshops with a planning team consisting of members from private, state, federal, and tribal agencies. The planning team makes flow levels needed to protect fish, wildlife, water quality, scenic and aesthetic qualities, navigation, and environmental factors. Municipal and industrial water suppliers and hydropower plant operators make recommendations based upon projected water supply and energy demands.

The department then: (1) evaluates the recommended flows in relation to the hydrological and biological data that has been generated, existing water rights, current and proposed water use, and water availability; and (2) develops proposed instream flows based upon considerations of equity among users while providing for the protection and preservation of instream values.

e. Finally, a draft program document is prepared including proposed administrative rules and a supplemental environmental impact statement if one has been deemed necessary. In addition to the minimum flows, the draft regulation includes sections which incorporate pasta administrative stream closures and low flow limitations, define appropriate new closures, and define management procedures and relationships. When the program and proposed rules have undergone a thorough inhouse review by four separate divisions, the Assistant Director of Water Programs, and the department'' Assistant Attorney General, a draft document is prepared for review and comment by the general public and other government agencies.

f. The fifth phase involves public participation leading to adoption of the rules. A mailing list is prepared and approximately 200 program documents are mailed out for public review (250 in the case of the Kitsap). At the same time, copies are sent to the Ecological Commission for advice, guidance, and approval.

About a month after distribution of the draft program document, public hearings are held to receive input into the program from the public. All comments are thoroughly considered and responded to in the development of the final program document.

Public statements can again be made at the program adoption proceeding, usually scheduled two to four weeks after public mailing of the final document. The final proposed rules are considered for adoption by the director or deputy director. As the decision maker, he may adopt the rules as submitted, change them, or direct the department to study the matter further.

It appears you are assuming that property owners automatically own any surface waters that may cross or lie adjacent to their land. Under the laws of the State of Washington, water flowing in a natural stream is not privately owned. The owner of riparian lands does have rights for such things as boating, swimming, and other recreational and aesthetic purposes which do not

diminish the quantity of water remaining in the surface water source. However, since the enactment of the "Water Code" of 1917, the permit system provides the exclusive means, under state law, to establish a new right to use water. Note is made that even this is a "right to use" only and does not constitute an ownership in the water itself. The 1917 Water Code, RCW 90.03.010 provides:

> "The power of the state to regulate and control the waters within the state shall be exercised as hereinafter in this chapter provided. Subject to existing rights all waters within the state belong to the public, and any right thereto, or to the use thereof, shall be hereafter acquired only by appropriation for a beneficial use and in the manner provided and not otherwise; and, as between appropriations, the first in time shall be the first in right." (emphasis added)

The Water Resources Act of 1971 (90.54 RCW) has vested the Department of Ecology with the statutory authority to establish, in the rivers and streams of the state, base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values.

Any waters over and above the established base flows and existing rights may be allocated to beneficial uses through the permit system. Anyone may make application for a water right. Each application will be investigated to determine the following:

a. Availability of water in the source for appropriation.

b. Whether the proposed use will conflict with any existing rights; and,

c. Whether the use threatens to be detrimental to the public interest.

If the proposed use is in accordance with the above criteria, a permit will be issued. When it can be shown that the applicant is putting the water to an actual beneficial use, a final water right certificate will be issued.

3. The rapid development occurring in the Kitsap WRIA could soon endanger the viability of instream measures unless action is taken to protect minimum flow levels for the future protection of those resources. The authorizing statutes for this program require that the department prepare for the future by establishing protection for streams before they are endangered and the instream values irretrievably lost.

Mr. Peter E. Overton, Property Owner, Coulter Creek Watershed

4. All of the small streams proposed for closure under WAC 173-515-040(3) have an average annual flow of 5 cfs, or less and have been identified as having high instream values for anadromous fish, aesthetics, water quality, and/or recreation. The department decided to treat these streams as a class because of their extremely small size and high

instream values. This decision was made, however, only after looking at the hydrological condition, anadromous fish utilization, and aesthetic and environmental properties of each stream individually.

See response to No. 1, above.

5. The Department of Ecology made every effort to inform the public of the intent to develop administrative rules for managing the instream resources of the Kitsap Water Resource Inventory area (WRIA) 15 in accordance with the procedures defined in the State Administrative Procedures Act (RCW 34.04.025), the Washington State Register Act of 1977 (RCW 24.08 (1) and (2), the Water Resources Act of 1971 (RCW 90.54.050(2), and the Minimum Water Flows and Levels Act (RCW 90.22.020).

Specifically:

Chapter 34.08 RCW requires, "the publication of a state register by which the public will be adequately informed of the activities of government and where they may actively participate in the conduct of state government and influence the decision making process of the people's business."

RCW 34.08.030 (1) specifies that the full text of any proposed new or amendatory rule shall be published in the State Register prior to the public hearing on the proposal, and that such material, when published shall be considered to be the official notification of the intended action.

THE FULL TEXT OF THE ADMINISTRATIVE RULES OF THE KITSAP INSTREAM RESOURCES PROTECTION PROGRAM WERE PUBLISHED IN THE STATE REGISTER ON DECEMBER 3, 1980. THE ACT REQUIRES THAT NO PROCEEDING BE HELD ON ANY RULE UNTIL 20 DAYS HAVE PASSED FROM THE PUBLICATION DATE. THIS IS TO ALLOW ADEQUATE TIME FOR THE PUBLIC TO REVIEW PROPOSED RULES. IN ORDER TO COMPENSATE FOR THE CHRISTMAS HOLIDAYS, THE DEPARTMENT ALLOWED 35 DAYS BEFORE THE PUBLIC HEARINGS ON JANUARY 7 AND 8, 1981.

Chapter 34.04.02 RCW requires that prior to adoption, amendment, or repeal of any rule, notice must be filed with the Code Revisor for publication in the State Register, and that such notice be mailed to all persons who have made timely requests of the agency for advance notice of its rule making proceedings. Such notice shall include (i) reference to the authority under which the rule is proposed, (ii) a statement of either the terms of substance of the proposed rule or a description of the subjects and issues involved, and (iii) the time when, the place where, and the manner in which interested persons may present their views thereon. All interested persons are to be afforded reasonable opportunity to submit data, views, or arguments, orally, or in writing.

THE DEPARTMENT MAILED 250 COPIES OF THE PROGRAM DOCUMENT TO INDIVIDUALS OR REPRESENTATIVES OF ALL IDENTIFIED INTERESTS. THE PROGRAM DOCUMENT INCLUDED THE INFORMATION LISTED IN I, ii, and iii ABOVE, AND THE PROPOSED ADMINISTRATIVE RULES. COVER LETTERS

WERE INCLUDED REQUESTING PUBLIC INPUT INTO THE PROGRAM. A COMMENT PERIOD OF TWO MONTHS WAS ALLOWED, WITH FOUR PUBLIC HEARINGS HELD MID-WAY BETWEEN TO PERSONALLY INFORM THE PUBLIC, ANSWER QUESTIONS, AND RECEIVE DIRECT INPUT FROM THE PUBLIC.

Chapter 90.54 RCW requires that prior to adopting a rule under this section, the department shall conduct a public hearing in each county in which waters relating to the rule are located, and that the public hearings shall be preceded by a notice placed in a newspaper of general circulation published within each of said counties.

PUBLIC HEARINGS WERE HELD IN KITSAP COUNTY, PIERCE COUNTY, MASON COUNTY, AND KING COUNTY. EACH HEARING WAS PRECEDED BY ANNOUNCEMENT IN LOCAL NEWSPAPERS.

Chapter 90.22 RCW requires that a public hearing be held in the county in which the stream, lake, or other public water is located, and that notice of hearings be given by publication in a newspaper of general circulation in the county or counties in which the stream, lake, or other public waters is located, once a week for three consecutive weeks prior to the hearing.

FOUR PUBLIC HEARINGS WERE HELD IN THE INVOLVED COUNTIES AND NOTICES WERE PUBLISHED IN THE BREMERTON SUN (KITSAP COUNTY) ON DECEMBER 17, 24, AND 31, PENINSULA GATEWAY (PIERCE COUNTY), DECEMBER 17, 24, AND 31, MASON COUNTY JOURNAL, DECEMBER 18, 25, AND JANUARY 1, VASHON BEACHCOMBER (KING COUNTY), DECEMBER 18, 25, AND JANUARY 1. THE PUBLIC NOTICES INCLUDED THE NAME OF EACH STREAM FOR WHICH THE DEPARTMENT IS PROPOSING ACTION AND THE TYPE OF ACTION BEING PROPOSED.

6. A glossary has been incorporated in the program document.

7. We disagree:

   (a) The Department of Ecology is charged under 90.54 RCW with the responsibility to see that perennial rivers and streams of the state are retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. <u>The 1971 Act does not allow for exclusion of streams</u>.

   (b) Without a specified base flow for Coulter Creek, new wells that tap aquifers in hydraulic continuity with the stream could eventually deplete the flow. The instream flow is an alerting mechanism that indicates when a stream reaches a critical drawdown state.

8. Existing water rights are not affected by the proposed actions in accordance with Washington State law. Further, future single domestic use is exempt from the proposed restrictions.

Larger scale appropriations can be secured in the future from several possible sources:

- Surface water would be subject to the proposed minimum flows and seasonal closures. Storage would be necessary to assure water availability during closure and low flow periods.

- Ground water in hydraulic continuity with surface water would be subject to a base flow requirement. Storage would be advisable to assure continuous availability.

- Ground water not in significant hydraulic continuity with surface water would not be subject to minimum flow limitations.

- Several proposals exist to import water from outside WRIA 15 sometime in the future.

It must be recognized that water is scarce in the Kitsap WRIA, particularly during the normal low flow period in the summer and early fall. Setting aside some of this water to assure the continued viability of instream resources, particularly anadromous and native fish, further restricts potential sources of water supply. In accordance with state law the department cannot issue water rights for consumptive uses that would result in damage to these fragile resources. Therefore, the proposed regulations are designed to assure protection of these resources in future water right activities. With regard to proposed stream closures, both partial and full year, it is the department's finding that water is not available in excess of minimum instream flow requirements plus existing rights a sufficient amount of time to allow additional consumptive uses.

Local governments recognize the scarcity of water in the Kitsap Water Resource Inventory Area to support future development. Zoning restrictions and land use plans reflect this scarcity by providing tight controls on land use alterations.

Also see Comments, pages C-23 to C-36, Appendix C, and DOE Responses, pages D-39 to D-43.

Mr. Jerry Reid, Alpine Evergreen, Inc. and Reid Realty, Inc.

9. Please refer to Responses No. 1 and No. 5.

10. Please see Response No. 8.

Gene Hooker, McCormick Land Company

11. See Response No. 89, especially paragraphs 10-18.

12. See "Cost Summary", pages D-19, D-21, Appendix D.

B. BREMERTON, KITSAP COUNTY PUBLIC HEARING

Mr. Paul Dorn, Biologist, Suquamish Indian Tribe

13. Thank you for your participation in the public hearing. Your statement concerning Indian treaty rights is noted. Please also see responses 81 through 83.

Mr. Toby Thaylor, Attorney, Point No Point Treaty Council

14. Thank you for your participation in the public hearing. Please see responses 78 through 80.

Mr. Charles Moore, City of Bremerton Water Department

15. Thank you for your review of the Kitsap Instream Resources Protection Program and your participation in our meeting January 1980 with water suppliers of the Kitsap peninsula, the instream flow workshops, and the public hearing of January 1981.

The department acknowledges the age of some of the hydrological data used in determining instream flows and closures. The basic data used in the program was derived from the most comprehensive water supply study ever done on the Kitsap Peninsula: "Water Supply Bulletin No. 18, Water Resources and Geology of the Kitsap Peninsula and Certain Adjacent Islands," prepared by M. E. Garling, Dee Molenaar and others, with contributions by the U.S. Geological Survey. This data was supplemented by information from more current studies and measurements (see bibliography) and meetings with domestic, municipal, indian, and navy water suppliers to update user information. Also see response No. 70.

Mr. Michael R. McCormick, Dick-Tracy Associates, Planningn Consultants

16. See written statement, pages C-19 to C-22, Appendix C, and DOE Responses, pages D-30 to D-39, Appendix D.

C. VASHON, KING COUNTY PUBLIC HEARING

Ms. Margery Smith, Westside Water Association

17. See page C-18, Appendix C, and DOE Response, pages D-12, D-13, Appendix D.

Mr. Roy Wilkerson, King County Water District No. 19

18. Thank you for your review of the Kitsap Instream Resources Protection Program and your participation in both the meeting of January 1979 to involve water suppliers of the Kitsap Peninsula and the public hearing of January 1981.

Please see Response No. 1. We hope this will help to alleviate some of your concerns.

D. GIG HARBOR, PIERCE COUNTY PUBLIC HEARING

Mr. David Morris, Private Citizen, Gig Harbor

19. See written statement, page C-10, Appendix C, and DOE Responses, pages D-15 to D-22, Appendix D.

Ms. Pat Wiles, Harbor Water Company, Gig Harbor

20. See written statement, page C-15, Appendix C, and DOE Responses, pages D-26 to D-27, Appendix D.

Mr. Dave Allard and Mr. Paul Allard, Private Citizens

21. Only those future wells taping relatively shallow strata that contribute to surface water flow would be affected. Wells tapping only deeper zones would probably be exempt. The determination of whether a well would be subject to minimum flows will be made on a case-by-case basis by the department's regional office when an application is received.

    A copy of the department's "Guidelines for Determining Significant Hydraulic Continuity" (Mahlum, et al., 1980) has been mailed to each of you. We hope this information will answer your questions more completely. If more information is needed, please telephone (206)753-6189. Thank you for your participation.

Robinson, Noble, and Carr, Inc.

E.1.22. Refer to following letter.

STATE OF WASHINGTON
Dixy Lee Ray
Governor

DEPARTMENT OF ECOLOGY

E 1

April 17, 1980

Mr. John Noble
Robinson and Noble, Inc.
10318 Gravelly Lake Drive, S.W.
Tacoma, Washington 98499

Dear Mr. Noble:

22 We have received your letter of comment on our rough draft of the Kitsap Basin Instream Resources Protection Program. Your comments express valid concerns which were among those considered in development of the Kitsap Basin Program document and proposed rules.

The availability of water supply sources on the Kitsap Peninsula is a critical situation. As you know, all of the basin's streams are small and would experience adverse impacts if subjected to large diversions for municipal and industrial water supply. Additionally, most of the streams in the basin are sustained through the dry summer months by ground water from shallow aquifers. Excessive withdrawals from those shallow aquifers in hydraulic continuity with streams could cause such steams to go dry during the summer.

The Department of Ecology has a statutory responsibility to protect instream flows not only for anadromous fish, but for the preservation of water quality and the protection of wildlife, scenic, aesthetic, and environmental values, as well as recreational and navigational values.

Although the Instream Resources Protection Program (IRPP) will very likely impact upon future withdrawals of water from shallow aquifers, it will not "prevent" property development in the Kitsap Basin. the program does not affect single in-house domestic use and, while large developers may not find it economically desirable to investigate water availability in deeper aquifers, they will be permitted to do so. If water is not available in the deep aquifers, then perhaps further development should not occur.

In any case, applications for ground water withdrawal will be considered on a case-by-case basis. The department will investigate each application to: (a) determine if water is available for appropriation, (b) find and determine to what beneficial use, or uses it can be applied, (c) determine if any existing water rights will be violated by the new use, and (d) determine whether the proposed appropriation threatens to prove detrimental to the public interest.

We would like to clarify one of the purposes of the IRPP. Closure of streams to further appropriation is for the protection of instream flows. The closures are not meant to be an instrument for controlling development. Your concern that development of water supply sources outside the basin could result in increased development on the Kitsap Peninsula is, nevertheless, a valid one. As you stated, there are currently no firm plans for importing water from the Olympic Peninsula as has been proposed by the various county water supply studies. However, unless the four counties in the basin make an effort to restrict growth and to conserve available water, the current rate of development will result in demands in excess of the existing water supply capacity within WRIA 15 and will force water suppliers to seek other sources. Studies indicate this is expected to happen around 1990.

Selection of future water supply sources is a problem that will have to be solved by the involved counties as the situation becomes more critical. The Instream Resources Protection Program (IRPP) does not have the scope to work out those solutions.

The IRP Program will determine the restrictions necessary to protect instream flows in any selected surface water supply sources.

We would like to thank you again, Mr. Noble, for taking the time to review and comment on the Kitsap Basin Instream Resources Protection Program. Your suggestion to delete Appendix C has been observed, and we feel this helps to improve the document.

Sincerely,

Eugene F. Wallace

Eugene F. Wallace, Supervisor
Water Resources Management Division

EFW:bjw

cc: Kris Kauffman
Ken Slattery
Jeanne Holloman

E.2.

23. It is the specific purpose of the Instream Resources Protection Program to protect streams from depletion. Most of the streams proposed for all year or partial year closures are sustained through the dry summer months by the inflow of ground waters. In many cases, streams would go completely dry if it were not for this ground water effluent.

24. Future wells will be affected only in those cases where the minimum flow of a stream would be significantly affected by ground water withdrawals. The small streams or fully allocated streams now proposed for all year closure cannot provide enough water to meet the large demands of a public water supply service. The streams proposed for summer closures may be able to provide water for public supply during high precipitation periods, if storage is provided. Any permits issued on these resources will be conditioned so that withdrawals will stop during the dry, low flow periods. Well permits will be conditioned to a minimum instream flow or closure if significant hydraulic continuity has been determined. If a proposed well does not tap a zone having hydraulic continuity with a stream, or if the well has continuity but does not significantly affect the stream, an unconditioned permit may be issued. Significance will be determined on a case-by-case basis in accordance with "Guidelines for Determining Significant Hydraulic Continuity," (Mahlum et al, 1980).

25. See Responses No. 8, 22, par. 4, 5, 6, 7, and Response No. 24.

26. See Response No. 33.

F. Washington Department of Transportation

27. Thank you for your review of the Kitsap Instream flow program and for the support you have given throughout the overall W.W.I.R.P. Program.

G. Ms. Marjery Smith, Westside Water Association, Vashon Island

28. When considering the following four factors, it appears that you are unduly concerned about the impacts of the Kitsap Instream Resources Protection Program on Westside Water Association's ability to meet future water supply demands:

    a. Current county zoning and subdivision regulations in the franchise area;

    b. The amount of your existing water rights on Needle Creek and tributary springs;

    c. Condition of the existing water supply system;

    d. Annual average flow of Needle Creek.

The franchise boundaries lie within an area zoned G (General) by King County. The G zone was designed to prevent improper intrusion of business and industrial uses in undeveloped areas not yet subjected to urban development pressures. The G zone allows SE (Suburban Estate) uses, which permit more rural agricultural uses than is practical in more urban areas, for instance, horses, private stables, chickens, and small farms. Minimum lot size in the SE zone is 35,000 sq. ft. and precludes high density use.

SR (Suburban Residential) uses are also allowed in the G zone, with a minimum lot size of five acres. Within this classification, lots may be subdivided to smaller lot sizes (with conditions, such as the provision of sewers or septic tanks, etc.) if it can first be shown that there is a water supply source available, and that both the supply source and system have been approved by the King County Health Department. These same requirements apply in the SE and A Agricultural classification within the G zone.

Consequently, under existing King County zoning, and subdivision ordinances, development in the Westside Water Association franchise area cannot occur beyond the capacity of available, approved water supply sources and systems.

Although your bylaws state that prospective new customers must bear the entire cost of updating the system or extending it, before you can approve the actual construction, you will be required by King County to show proof of valid water rights and availability of water in the proposed source.

At the present time, Westside Water Association possesses water rights on Needle Creek and tributary springs totaling 2.05 cfs (900gpm). Actual use from these sources currently totals .60 cfs (272 gpm), about 1/3 of the amount certificated. It would appear that your present water right assures you of adequate quantities of water to satisfy any realistic future demand projection, especially in view of the limited growth capacity of the area.

An inhibiting factor to allowing additional connections to the system may be that since all but 100 feet of water lines are below county code size, the existing system may not be able to handle any additional services until upgraded.

When considering that the estimated average annual flow of Needle Creek is 4.8 cfs and that your existing water right of 2.05 cfs exceeds the total flow in Needle Creek at certain times of the year, the department feels justified in closing Needle Creek to additional consumptive diversions.

To give a direct answer to your direct question: The state will not compel you to provide water where there is not water available.

H. Washington Department of Game

29. Thank you for your continued support. We realize our proposed instream flows are often below your recommended flows and attribute this to DOE's authorizing statutes that enable the setting of minimum and base flows, as opposed to WDG's desire to achieve optimum flow conditions for fish and wildlife propagation. The amount of time you have spent in consultation with us is greatly appreciated.

30. Approximately 75 percent of the Coulter Creek Watershed is owned by private tree-growers who oppose closure of Coulter Creek to further consumptive appropriation. Water rights have been issued on Coulter Creek and tributaries in the amount of 27.06 cfs, when available, for nonconsumptive uses. Of this amount, 25 cfs is held by the Department of Fisheries for a fish hatchery at the mouth of the stream. Since this is more water than is in Coulter Creek much of the year, the instream flow proposed by the department is effectively protected by this water right. Consequently, the department is proposing instream flows only for Coulter Creek.

31. Water rights that are issued in the future will be subject to the minimum flows. In the case of partial closures, water rights would have specific dates indicating when the right is valid and when it is not. Spot checks and complaints will indicate whether the provisions are being observed by future water right holders. If not, legal measures will be employed to assure compliance.

I. Mr. David R. Morris, Gig Harbor

Refer to the following letter.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504 • (206) 753-2800

DONALD W. MC
Director

February 17, 1981

Mr. David R. Morris
10436 Kopachuck Drive N.W.
Gig Harbor, WA 98335

Dear Mr. Morris:

We would like to thank you for your review of the Kitsap Instream Resources Protection Program (IRPP). You have pointed out a few areas that need clarification.

32. First, the pamphlet to which you refer was developed as an informational brochure for the public. It was never intended for use as a technical document. Technical data and implementation procedures for dealing with ground water are available at the Department of Ecology for review by those who are interested. If you would like a briefing on the technical methodologies, please telephone me at (206) 753-3893, and I will set up a meeting for you with our technical group.

33. Concerning your statement "the question of which ground water is exempt must be dealt with prior to adoption":

At the present time, there is not enough existing data from which to determine the locations of exempt or nonexempt aquifers throughout the entire water resource inventory area. Studies to generate the data would require years and prohibitive costs. Moreover, by the time an areawide study were completed, it would be outdated by the effects of any new growth and development and the construction of new wells that had occurred during the study period.

Consequently, any exemption of an aquifer from the program will be determined by investigating ground water withdrawal impacts on stream systems, on a case-by-case basis. New language is currently being developed for incorporation in the document to define the types of aquifers most likely to be affected by the IRPP.

34. The inventory of the many streams in the Kitsap Water Resource Inventory Area (WRIA 15) did not occur as part of the Kitsap Instream Resources Protection Program (Kitsap IRPP). The study that identified 582 streams and 186 lakes and reservoirs in WRIA 15 was conducted in 1965 by the Department of Conservation, Division of Water Resources (see Water Supply Bulletin No. 18, Water Resources and Geology of the Kitsap Peninsula and Certain Adjacent Islands by

M.E. Garling, Dee Molenaar, and others, with contributions by the United States Geological Survey). The Kitsap Instream Resources Protection Program conducted by the Department of Ecology was begun in mid 1979. The Kitsap IRPP utilized the inventory of streams and hydrological data from the 1965 study to develop the 1979 Instream Resources Protection Program. No Department of Ecology funds were allocated for stream inventory.

35. Regarding your statement, "of the 570 approximately streams which were inventoried in WRIA 15, only about 70 were reported to be capable of fish production":

We should clarify that according to the departments of Fisheries and Game and other qualified fisheries biologists in the area, almost all of the streams in the Kitsap WRIA are capable of fish production. The 70 streams proposed for action by the Kitsap Instream Resources Protection Program are those that have been documented as significant for fish and wildlife habitat by the departments of Fisheries and/or Game, and Indian fishery management representatives, or those for which the Department of Ecology has determined that no water is available for consumptive appropriation (see page 32 of the Kitsap Program document).

It is not the department's intention, Mr. Morris, to spend additional taxpayers money on every single or potential streambed in any area for purposes of attempting to regulate aesthetics and/or environmental values. The remaining 512 streams in WRIA 15 will be investigated for hydrological conditions, fish values, aesthetic and environmental values (stream characteristics and water quality) on a case-by-case basis as applications are received in the DOE regional offices. This investigation process is already in effect as a part of the existing water right certification process.

36. We do not agree with you that the terms "aesthetic qualities" and "environmental values' are abstractions.

The term "environment" can be defined simply as the sum total of all biological, chemical, and physical factors to which organisms are exposed. "Environmental values" then can be defined as the quality of the biological, chemical, and physical factors to which organisms, including human beings, are exposed.

The term "aesthetic," when used alone, does have the nature of abstraction because it refers to beauty, sensitivity to art and beauty, showing good taste, etc. – concepts that are interpreted in different ways by different people. Add an s to aesthetic(s) and new concepts are added, including "psychological responses to beauty" (see Webster's New World Dictionary, Second College Edition). When speaking of "aesthetic qualities" you apply labels to various abstractions of "beauty" and identify some of the variables that cause "psychological responses".

The Environmental Protection Agency labels aesthetic qualities subjectively as water quality parameters:

> "All waters free from substances attributable to wastewater or other discharges that: 1) settle to form objectionable deposits; (2) as debris, scum, oil, or other matter to form nuisances; 3) produce objectionable color, odor, taste, or turbidity; 4) injure or are toxic, or produce adverse physiological responses in humans, animals, or plants; and 5) produce undesirable or nuisance aquatic life."

The U.S. Geological Survey (USGS), in an effort to develop a system for evaluating factors contributing to aesthetic or nonmonetary aspects of a landscape attempted to quantify some elements of aesthetic appeal while eliminating, as much as possible, value judgments or personal preferences. Under this system assignment of quantitative estimates to aesthetic factors leads not so much to ratios of value as to relative rank positions. In order to compare different landscapes or landscape features, the USGS listed the following as relevant features of a landscape which influence aesthetic impression and human interest in selected areas:

> Physical Factors: River width, depth, and velocity at low flow, bankfull depth, flow variability, river pattern, ratio of valley height to width, bed material, bed slope, basin area, stream order erosion of banks, deposition, width of valley flat.
>
> Biological and Water Quality: Water color, turbidity, floating material, water condition, amount and type of algae, amount and kind of larger plants, river fauna, pollution evidence, diversity to condition of valley and hillslope fauna.
>
> Human Use and Interest: Number of occurrences of trash and litter per 100 feet of river, material removable, artificial controls, accessibility local scene vistas, view confinement, land use, utilities, degree of change, recovery potential, urbanization, special views, historic features, and misfits.

While the above tests were not specifically applied to the streams of the Kitsap WRIA, these and other methodologies do exist for identifying and evaluating aesthetic qualities (see attached bibliography).

In the specific case of the Kitsap Peninsula, values derived from the location of homes near surface waters or in wilderness areas are becoming increasingly important to property owners. In 1977, the Vashon Island Community Council (a local citizen's group), in cooperation with staff from the University of Washington's Department of Community and Organization Development and Department of Political Science, conducted surveys and 56 neighborhood meetings, five area meetings and an all-island meeting to assess citizen desires for the future of the community. A

common goal was identified: “To preserve the Island’s Way of Life.” Community values identified in the surveys and meetings provided King County the basic criteria for development of a community plan for Vashon Island (1978).

The Kitsap County Comprehensive Plan, adopted August 1977, identifies a basic purpose: “To manage growth in a way designed to be beneficial for both present and future count residents; and to preserve the quality of life most residents now value so highly.” The primary physical development policy to be pursued by Kitsap County is the Urban Concentration Concept, i.e., to concentrate future growth around already existing urban centers where utility and services exist or are soon to be provided, allowing rural areas to be developed only to the intensities and uses that do not require substantial services and expenditures. The decision to pursue the Urban Concentration Concept was based on three overriding concerns: 1) the expressed desires of the public to maintain the semi-rural character of Kitsap County in the face of rapid growth; 2) minimize public costs of providing services; and 3) to do the least amount of damage to the natural resources of the county.

In at least one specific case (Nettleton Lakes, 1970), local residents vigorously opposed development of a 26,295 acre tract in Kitsap and Mason counties. The project would have included lakes, parks, green belts, commercial areas, a marina, golf course, and residences totaling 5,983 units. The strongest objections were based upon adverse impacts the project would have had on local reservoirs and the Dewatto River.

Community concerns, values, and policies like the above provide the department a strong basis from which to make aesthetic and environmental policy decisions. Most of the streams in WRIA 15 are so small that irretrievable damage could easily occur from cumulative single residence use, unless some alerting measures are set up within the water right permitting process. The Kitsap Instream Resources Protection Program provides a system to insure that this will not happen from over-allocation of water from these small streams.

The Water Resources Act of 1971 declares aesthetic and environmental values to be beneficial uses of water, compatible with the enjoyment of the public waters of the state (RCW 90.54.020(1).

37. At any time any individual or group feels their rights, including the rights to experience and enjoy desirable aesthetic qualities and environmental values, are being impinged upon by individuals making unlawful or excessive diversions of water, they can appeal to the Department of Ecology to take enforcement action. If the Department of Ecology is the offender, i.e., issues a water right to an individual or group that impinges upon other rights, appeals can be made to the Washington State Pollution Control Hearings Board. (See Little Spokane Community Club vs. State of Washington, Department of Ecology, PCHB No. 70-7.)

39. Regarding your inquiry concerning past and future costs of the Kitsap Instream Resources Protection Program:

From the start of the program in July 1979, through the public hearings on January 7 and 8, 1981, the total cost of the Kitsap Instream Resources Protection Program was $21,864.00. Eighty-eight hundred dollars ($8,800.00) of this amount was funded by federal programs. Total cost to the State of Washington was $13,064.00. The Kitsap Program is scheduled for adoption April 8, 1981. Assuming we do not exceed this deadline, additional program costs should be around $6,000.00. Most of this cost will be absorbed by the River Basins Commission.

We hope this response has answered some of your questions, Mr. Morris. If you have any additional concerns, you may contact Jeanne Holloman, Kitsap Project Planner at (206) 753-6189. Thank you again for your interest in the Instream Resources Protection Program.

Sincerely,

Glen H. Fiedler
Assistant Director
Office of Water Programs

GF:mg
020947

Enclosure

REFERENCES

Aesthetic Qualities and Environmental Values

Geological Survey, 1969. Quantitative Comparison of Some Aesthetic Factors Among Rivers, Circular a620, by Luna B. Leopold. Washington, D.C.

Geological Survey, 1971. A Procedure For Evaluating Environmental Impact, by Luna B. Leopold, et al. Washington, D.C.

State University of New York at Binghampton, 1971. Evaluation of Natural Rivers, by Marie Morisawa. United States Department of the Interior. Water Resources Research Project No. C-1779, Contract No. 14-31-0001-3166. New York.

U.S. Environmental Protection Agency, 1976. Quality Criteria for Water, "Aesthetics." Washington, D.C.

University of California, Berkeley, 1971. An Aesthetic Overview of the Role of Water in the Landscape. Prepared for National Water Commission. Virginia.

Masteller, M.C., et al. Measurement of Streamflow Aesthetic Values, 1976. In Methodologies for the Definition of Stream Resource Flow Requirements: An Assessment. Utah University, Salt Lake City, Utah.

Walker and Havens Landscape Architects, 1973. An Evaluation of the Aesthetic Values as Related to the Water Resources of the Columbia – North Pacific Region. Eugene, Oregon.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504 • (206) 753-2800

DONALD W. MOOS
Director

June 11, 1981

Mr. David R. Morris
10436 Kopachuck Drive N. W.
Gig Harbor, Washington 98335

Dear Mr. Morris:

Our intent was to respond to your March 30, 1981 letter of comment on the Kitsap instream program as part of a large package of comments and responses to be included in the final program report. Because your June 1, 1981 follow-up letter indicates you desire a direct response; this letter is to satisfy your request. Your letter and this response will be included in the comments and responses package as well as your earlier letter of January 13, 1981 and our subsequent response letter of February 17, 1981.

Your March 30, 1981 letter expresses continued concern with the department's intent to review the matter of proposed groundwater withdrawal impacts on surface waters on a case-by-case basis. The department is required by the Water Resources Act of 1971 to fully recognize in its water allocation and use programs the natural interrelationships of surface and groundwaters. (RCW 90.54.020(8)) We believe the most appropriate and efficient means of complying with this legislative direction is to respond to well proposals on a case-by-case basis for the following reasons:

1. Data currently does not exist to define the occurrence and extent of aquifers in direct hydraulic continuity with surface water and the potential effects of wells on streamflow.

2. The cost of studies to produce the data needed to define such aquifers and potential effects would be prohibitive even if only the Kitsap Peninsula were studied. Costs would be enormous to collect adequate data for this purpose statewide. (A statewide program would be needed for consistency). The types of data needed for such a determination include aquifer materials, specific parameters defining geohydrologic characteristics (storage capability, transmissivity, aquifer boundaries), and pump testing. An extremely large number of test wells would have to be drilled to supplement the record of well logs currently available. This type of determination requires very specific data; conditions cannot be assumed or extrapolated.

3. Many areas within the Kitsap WRIA (and certainly statewide) may not require this data within the foreseeable future. A case-by-case approach permits limited state resources to be focused on specific problems.

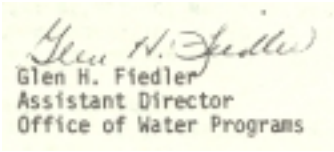
4. Whether a significant effect on surface water will result depends on the specific characteristics of the individual well. These characteristics include depth, casing, rate and pattern of pumping, total days pumped during a year's time, and seasonality of pumping. These are factors that cannot be included in a determination of the effects of pumping on a stream flow unless a specific proposal is available for evaluation. For instance, a 20 gallon per minute well in a specific location may not have a significant effect on a nearby stream whereas a 100 gallon per minute well in the same location could have a significant impact on stream flow. Therefore, it is more proper to state that individual wells in the future may be exempt from the rules if they do not significantly affect stream flow rather than assuming that certain aquifers may be exempt. Enclosed is a copy of the Office Report No. 86, Guideline for Determining Significant Hydraulic Continuity which has been prepared to provide a consistent method for making case-by-case evaluations of the effects of proposed wells on surface water flow.

In regard to the terms "aesthetic quantities" and "environmental values", the department acknowledges that these terms mean different things to different people. We have recently initiated a review of chapter 173-500 WAC, the overall administrative rules covering the conduct of the department's basin planning activities. As part of this review, we will consider operational definiti9ons of these terms which hopefully could lead to a consistent standard in the consideration of permit issuance and future instream flow setting. Because of the concerns you have expressed, your name and address have been placed on a mailing list to be contacted when we initiate public review of chapter 173-500 WAC amendments.

Your final question asked what portion of the total cost for the Kitsap program represented labor by WDOE staff. The cost for salaries and employee benefits was $18,168.28 of which $8,800.36 was federally funded. Projections of staff time and cost required to meet priority program objectives (such as the completion of the basin instream programs) are included in calculations of future budget requirements. The time required to complete a particular program is projected by analyzing the time/labor requirements of specific tasks. The actual time and cost to complete a program may vary considerably from the projection if unforeseen labor requirements are encountered.

I hope this information adequately responds to your concerns. If you have further questions, feel free to contact Ms. Jeanne Holloman at 753-6189 in Olympia.

Sincerely,


Glen H. Fiedler
Assistant Director
Office of Water Programs

GHF:tf

NOTE: Responses No. 38, 40, and 41 correlate to those same numbers in Mr. Morris' written statement. Those comments were not answered in the Department's letter to Mr. Morris.

38. See Response No. 69 and the Glossary. See also Responses 8, 21, 24, and 65.

40. You are correct. The protection of fish and wildlife in rivers and streams is only one of the many features of the Instream Resources Protection Program.

41. Please refer to Responses No. 36 and 39.

J. Mr. Ronald R. Pinckney, Attorney for the Kitsap Golf and Country Club

42. Refer to the following letter.

DONALD W. MOOS
Director

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Mail Stop PV-11 • Olympia, Washington 98504 • (206) 753-2800

April 6, 1981

Mr. Ronald R. Pinckney
Law Office of McCluskey, Pinckney,
Sells, Ryan & Riehl
510 Washington Avenue
Bremerton, Washington 98310

Re: Your inquiry concerning the effect of the Kitsap Instream Resources Protection Program (KIRPP) on the plans of the Kitsap Golf and Country club to construct a well and retaining pond in the vicinity of Chico Creek:

Dear Mr. Pinckney:

42. In order to determine whether the Kitsap I.R.P.P. will affect construction of the proposed well, it will be necessary for the department to know the precise siting and proposed depth for the well. When this information is available an investigation can be made to determine how much water is available for appropriation, and whether there would be significant hydraulic continuity between the proposed well and Chico Creek. Enclosed for your information is a copy of the department's "Guidelines for Determining Significant Hydraulic Continuity."

We suggest that you contact our Regional Office, (206) 885-1900, as soon as possible to make application for a groundwater permit. If the proposed well site and/or depth is determined to be detrimental to the flow in Chico Creek, perhaps the department can assist you in selecting an equally desirable alternative location.

I will remain available should you need further information concerning the Kitsap Instream Resources Protection Program.

Sincerely yours,

Jeanne Holloman

Jeanne Holloman, Program Planner
Kitsap Instream Resources Protection Program

JH:nld

Enclosure

K. U.S. Fish and Wildlife Service

43. Your continued support of the Instream Resources Protection Program is greatly appreciated by the department.

L. Puget Sound Council of Governments

Thank you for your review of the Kitsap Instream Flow Program. We would especially like to thank Mr. Dick Callahan of your subregional planning staff for his input of information into the program. Our responses to your comments follow:

44. The instream flow program does not define the locations where new wells may and may not be drilled. These determinations will be made on a case-by-case basis as well permit applications are received by the department. Please see Reponses 24, 33, and 69.

45. The determination will be made by the Department of Ecology, but the well driller may be required to provide data upon which the determination will be made.

46. The Kitsap Instream Flow Program will not affect the 1990 timetable. The predictions were based upon feasible expansions of existing supply systems and the current known availability of ground water. Water demands associated with the predicted population growth can probably be met without affecting the established instream flows.

47. Two Bainbridge Island streams are proposed for closure: a tributary of Murden Cove, #434, Unnamed stream and tributaries, located in Section 15, Township 25 N., Range 2E; and a tributary of Fletcher Bay, #461, Unnamed stream and tributaries, located in Section 20, Township 25 N., Range 2E. Both streams have an annual average flow of 5 cfs or less.

M. Talmo, Inc., A Natural Resource Corporation – Contracting.
Bulldozing, Logging, Roadbuilding

48. The Kitsap Instream Flow Program does not require formation of additional departments nor an increase in staff. It does, however, help streamline our present water rights process.

49. It is exclusively our department's jurisdiction to allocate quantities of water to beneficial uses and to protect the availability of water for instream uses including water quality. Also see Response No. 89, paragraphs 10 through 17.

50. The management of streamside zones protects water quality but not the flow of water instream.

51. There is no other process by which protection for instream resources can be assured. Therefore, we do not feel your statement applies to the Kitsap Instream Resources Protection Program.

52. Please see Responses No. 2; 36, paragraph 11 through 15; 37, and 39.

53. Please see Responses No. 49, 51, and 89.

N. Washington Environmental Council

54. Thank you for your review of the Kitsap Instream Resources Protection Program. Your strong support is greatly appreciated by the department.

O. University of Washington, Fisheries Research Institute

55. Appropriate corrections have been made on page 17 of the program document.

56. Your information has been incorporated on page 24.

57. Your information has been incorporated on page 29.

58. The Lake Symington Homeowners Association hold a valid water right for 570 acre feet for storage in the lake with appropriation rights of 5 cfs for recreation and beautification. The water right requires that the normal amount of inflow into the lake must be allowed to pass out of the lake at all times except during the period of initial filling. During low flow periods, an amount equal to inflow to the lake is released to maintain the flow in the stream. The department cannot require augmentation of the natural flow of a stream if the natural flow is below the level of the established instream flow. The program does provide for future water rights to be conditioned so that when a stream flow diminishes to the established instream flow level, diversions must stop or cut back. The condition on the Lake Symington Homeowners Association's existing water right that requires inflow to be passed except during filling is in line with this provision.

59. Incorporation of additional stream closures into the Administrative Rules at this time would involve starting the legal process of the program over again from the beginning. Additional streams may be considered for closure during the first review of the program. During the intervening time, any water right applications will be reviewed by the Washington departments of Fisheries and Game, the Point-No-Point Treaty Council, and the Suquamish Indian Tribe.

60. 15 cfs corresponds to the optimum rearing flow derived by the departments of Game and Fisheries for Big Beef Creek, even though that level of flow is probably never retained through the summer. We believe the stream closure for the low flow period provides the maximum protection of rearing habitat possible for an unregulated watershed. The specified minimum flow for the low flow period has been changed to reflect realistic flow expectations.

P. Paul Garrison, Gig Harbor

61. A glossary including this term has been added to the program document. Also, see Response No. 69.

62. The best available data is customarily used until more current information is developed. The Kitsap Instream Resources Protection Program utilizes the best information and most comprehensive studies available. As new information is developed, it will be considered during periodic reviews of the program. See Response No. 1.

An analysis of the information contained in Appendix A, Driller Logs, Appendix C, Ground Water Rights and the accompanying geologic cross-sectional maps in water supply Bulletin No. 18 (Garling-Molenaar, 1965) provides the basis for our statement. Some more recently drilled deep wells have been successful in providing large quantities of water but, according to USGS sources, there have been several failures at finding water, the hits have not been 100 percent successful, and furthermore, some new wells that are now providing water are expected by the USGS to experience a reduced yield in the future.

63. You are correct. A footnote has been added citing the reference.

64. It seems you have misread the paragraph.

65. Pierce County's comprehensive Water Supply Study and Plan is a valid study prepared for the county by the Department of Public Utilities in conformance with the requirements of the federal government and the state's county Services Act, although the plan was completed in 1969, there is currently very little difference in the projected water supply needs or in the identification of potential future water supply sources.

The latest U.S. Geological Survey Study, (Ground Water Availability on the Kitsap Peninsula, Washington (1980)) estimated the average annual ground water recharge to streams on the Kitsap peninsula to be 17 times the 1975 annual ground water pumpage for the peninsula. While it was concluded that some unknown amount of this water is available for increased withdrawal by wells, it was acknowledged that increased withdrawals cause decreased streamflow, declining water levels, and increased seawater contamination.

66. There will be no amending of present laws or regulations and no increase of staff involved with implementation of the Kitsap Instream Flow Program. The laws are presently adequate for protecting instream resources. However, to be effective they must be implemented through planning programs such as the Kitsap I.R.P.P. The proposed regulations when adopted, will be included in a body of similar regulations covering other parts of the state.

67. Uses such as recreation, scenic and aesthetic values, and other environmental values were included by the Legislature in its authorizing statutes as beneficial uses deserving equal consideration. Please see Response No. 36.

Q. <u>Ms. Barbara Wiles, Harbor Water Company, Gig Harbor</u>

68. We wish to thank you, Ms. Wiles, for your participation in our January 1979 meeting to involve water suppliers of the Kitsap Peninsula in the Kitsap Instream Flow Program, and in the public hearing conducted at Gig Harbor January 8, 1980. The department appreciates your concern for availability of water for domestic use and fire protection (see Response No. 73, below).

69. "Shallow aquifer" is a simplified term used in the program document to refer to any aquifer lying at a depth shallow enough that direct hydraulic continuity with a surface water body could exist. The aquifers may or may not be overlain by a confining strata or

unit such as hard pan, clay, etc. The key consideration is whether an impervious unit (or a sufficient distance) separates a proposed well from a surface water body.

Future well permits will be approved of denied based upon case-by-case determinations of (1) whether or not hydraulic continuity exists between the aquifer proposed for tapping and a surface water body, and (2) the significance of impact on surface waters that will result from the proposed withdrawal of ground water. See Response 21 and 24.

A glossary which includes the term "shallow aquifer" has been added to the program document.

70. Please refer to the references cited in the bibliography; Response No. 22, paragraphs 4, 6, and 7; Response No. 28, for an example of the types of things that must be considered by a water purveyor in any plan for expansion of services; Response No. 36, paragraphs 11, 12, 13, 14, and 15.

71. The Water Resources Act of 1971 requires that base flows be retained to protect instream resource values including those you cite. Withdrawals of water that would conflict with the base flow can be authorized only where it is clear that overriding considerations of the public interest will be served (RCW 90.54.020(3)(a)). It may be that in some limited locations in the future, overriding considerations of the public interest will require that protection of instream resources be relaxed in order to provide water for human consumption. It would probably have to be clearly shown that no alternative source is physically available. Refer to WAC 17l3-515-070n (1), (2), (3), and (4). See Response No. 73 below.

72. The best available information was used in the development of the Kitsap Instream Resources Protection Program. As better information becomes available, it will be considered in periodic reviews of the program. Your statement that stream flows have undoubtedly been altered appreciably by man and nature in the intervening years since development of the available information may be correct. It is our feeling that this situation is precisely what makes the Kitsap Instream Resources Protection Program imperative at this time. The extremely small streams on the Kitsap Peninsula could be irretrievably damaged almost before being noticed if protective measures are not adopted.

73. Public water purveyors are required, within limitations, to supply water to their service areas (see Response No. 28). Also see Response No. 8.

Single domestic use is exempt from the program and firefighting is an emergency use of water and is not limited by administrative rules.

Future closures of additional streams to protect aesthetic or environmental values would require amending the regulations. The department would have to follow the strict requirements of the Administrative Procedures Act and other statutes.

R. Kitsap Audubon Society

74. Thank you for your review and strong support of the Kitsap Instream Flow Program.

75. The department has proposed instream flows and/or closures for streams that have been documented as significant for fish and wildlife or game, and Indian fishery management representatives, and those for which the Department of Ecology has determined that no additional water is available for consumptive appropriation. Many of the streams designated by the Kitsap Audubon Society as significant natural areas are included in this group of action streams. Instream flows only are recommended for Coulter Creek (Please see Response No. 30).

76. It is gratifying to know that the Kitsap Audubon Society recognizes the importance of protecting environmentally sensitive areas and that the Kitsap County Department of Community Development has incorporated the benefits of the North Kitsap Study into the County's Comprehensive Plan.

77. Relevant new information which you may provide on significant natural areas on the Kitsap Peninsula, along with supportive biological data will be considered by the department in relation to hydrological conditions during periodic reviews. If additional closures of streams are warranted, those closures can be incorporated in the Kitsap Instream Resources Protection Program by amending the administrative rules.

S. Gary W. Peterson, Commissioner, Point No Point Treaty Council

78. We would like to thank the Council for your support in the Kitsap Instream Resources Protection Program and for the participation of your staff in evaluating streams and selecting those in need of protection for recommendation of instream flows or closures.

79. Incorporation of additional stream closures into the Administrative Rules at this time would involve starting the legal process of the program over again from the beginning. A section will be incorporated in the Kitsap I.R.P.P. Standard Operating Procedure (SOP) to provide for your review of water rights on any stream in which the tribe has an interest. As a matter of course, water right applications will also be reviewed by the Washington departments of Fisheries and Game. New closures may be addended to the Administrative Rules at the first review.

80. This information has been included on page 27of the program document. In addition your oral statement at the January 8 public hearing appears on page C-3, and your written statement on page C-17.

T. Lawrence A. Webster, Tribal Council Chairman, The Suquamish Tribe

81. We would like to thank you for your support in the Kitsap Instream Resources Protection Program and for the participation of your staff in evaluating streams and selecting those in need of protection for recommendation of instream flows or closures.

82. The Bremerton water and power company purchased 160 acres of land in the Gorst Creek watershed in 1911. They immediately installed a steam pumping plant on Gorst Creek, and constructed a pipeline to tie into the city's existing water supply system on Charlston (now Wright Creek) and Anderson Creek (No. 272). This system supplied water to the City of Bremerton and outlying areas as well as the navy shipyard.

The system was continuously expanded to meet the municipal and industrial water supply demands of a growing population until eventually it included a pipeline from the Union River constructed to meet wartime demands at the navy shipyard. Although the city's water right claim is for 15 cfs and indicates a current (5/31/74) use of only 4 cfs, records indicate a use in the past of over 20 cfs.

Since the construction of the Casad Dam in 1957 water is no longer diverted from the Union River through the Gorst Creek pumping station on a consistent basis. Water can, however, be routed through the Gorst Creek system from storage on a branch of the Union River during the times when the gates on the Casad Dam are closed to permit the filling of Casad Lake.

In addition, Bremerton must depend on a tributary of Gorst Creek (Heinz Creek and Alexander Lake) to supplement the Union River diversion for three months out of the year; March, April, and May. Development of this supplemental source will probably occur within three years. The City of Bremerton is hopeful that Tacoma will eventually run pipelines into their water supply area and allow a tie-in of the Bremerton system.

If this does not occur, within eight years Bremerton will have to construct a filtration plant on Gorst Creek to once again utilize Gorst Creek as a source. (At the present time, DSHS has restricted the use of Gorst Creek water for municipal supply because of potential water quality problems in the watershed.)

Incorporation of additional stream closures into the Administrative Rules at this time would involve starting the legal process of the program over again from the beginning. A section will be incorporated in the Kitsap I.R.P.P. Standard Operating Procedure (SOP) to provide for your review of water rights on any streams in which the tribe has an interest. As a matter of course, water right applications will also be reviewed by the Washington departments of Fisheries and Game. New closures may be addended to the Administrative Rules at the first review. Grovers Creek

83. The department's Standard Operating Procedures for Ground water Management include "Guideline for Determining Significant Hydraulic Continuity" (Mahlum, et al, 1980). Copies are available at the Department of Ecology upon request.

U. Hood Canal Environmental Council

84. Thank you Ms. Davis for your participation in the Belfair public hearing. The Council's support is greatly appreciated by the department.

V. Michael R. McCormick, Dick-Tracy Associates, Planning Consultants

85. Most of your statements appear to be directed toward the overall Western Washington Instream Resources Protection Program, or program documents other than the Kitsap IRPP comprising this document. We will, however, endeavor to respond here to your concerns. Some of the following responses may be repetitive, but because of the severity of your comments, we feel it necessary to respond to each one in order:

86. Western Washington, in general, and particularly the Puget Sound region, is currently experiencing very rapid growth in population. As a result, the requirements for water to satisfy this burgeoning population is also growing. This demand includes water for drinking, energy production, food and fiber production, industrial processing, and for water-based recreation. These new uses, unless fitted into the context of existing uses, can potentially damage those existing uses, particularly the use of water by economically and culturally significant anadromous fish runs, and by native fish and wildlife. The state has a responsibility under the law to protect the habitat required by these resources, including a most significant habitat parameter, i.e., adequate quantities of flowing water. The purpose of the Western Washington Instream Resources Protection Program is to assure the protection and preservation of instream resource values. This is being carried out in accordance with the Minimum Water Flows and Levels Act (90.22 RCW) and the Water Resources Act of 1971 (see particularly RCW 90.54.020(3)(a)). Refer also to page 4 of the program document, paragraphs 5-7.)

87. The department has used the best available information in the development of instream flows or closures for the 70 out of 582 streams in the Kitsap Water Resource Inventory Area (WRIA).

88. We disagree that all future water rights will be abrogated by the Kitsap IRPP or that the establishment of minimum flows is arbitrary and capricious for certain streams.

    a. Single domestic use is exempt from the program.

    b. Stock watering use, except that related to feedlots, is exempt.

    c. Future rights for nonconsumptive uses may be granted.

    d. Closure has been proposed for streams where a high value for fish production has been documented and for which available historical data indicate the annual average flow is 5 cfs or less, and/or water right records indicate the stream is fully appropriated.

    e. Instream flows have been established for streams with continuous long-term flow data or for which flow correlation is possible.

f. Partial year closures are proposed for streams for which historical flow data indicates additional diversions during the dry summer months would adversely affect the fisheries resources in the stream to an unacceptable degree.

NOTE: Please see responses 1, 8, 21, 24, 65, and 109.

89. Chapter 75.20 RCW provides that the department, ". . . may refuse to issue any permit to divert water if, in the opinion of the director of fisheries or director of game, such permit might result in lowering the flow of water in any stream below the flow necessary to adequately support food and game fish populations in the stream." (Emphasis added).

THIS CHAPTER SPEAKS TO FISH USE ONLY, WITHOUT MENTION OF OTHER USES, AND DOES NOT PROVIDE FOR PUBLIC INVOLVEMENT IN THE SETTING OF INSTREAM FLOWS.

Chapter 90.22 RCW provides that the department ". . . may establish minimum water flows or levels . . . for the protection of fish, game, birds, or other wildlife resources, or recreational or aesthetic values . . . whenever it appears to be in the public interest.

It further provides that the department shall establish minimum flows to protect fish, game, or other wildlife and water quality, when requested by the departments of Fisheries and Game, or the Water Pollution Control Commission. This chapter also provides for public hearings.

NEITHER CHAPTER 75.20 RCW OR 90.22 RCW MAKES PROVISIONS AS TO HOW INSTREAM FLOWS ARE TO BE DETERMINED, ESTABLISHED, OR IMPLEMENTED.

Chapter 90.54 RCW directs the department "to develop and implement a comprehensive state water resources program which will provide a process for making decisions on future water resource allocation and use." The chapter further provides that the program "may be developed in segments so that immediate attention may be given to waters of a given physioeconomic region of the state or to specific critical (RCW 90.54.050) problems of water allocation and use."

Pursuant to Chapter 90.54 RCW, the Department of Ecology promulgated Chapter 173-500 WAC Water Resources Management Program to "provide guidelines to facilitate the further development of the water resources to the extent of their availability for further appropriation."

The chapter divided the state into 62 water resource inventory areas for planning and management purposes.

In 1978, the department, in response to requests from the departments of Fisheries and Game, made a commitment to establish instream flows for stream systems in the 26 water resource inventory areas in Western Washington.

The Western Washington Instream Resources Protection Program (WWIRPP) provides a mechanism designed to achieve legislative goals for the establishment of minimum or base flows in the streams of the state.

Some of the characteristics of the program are:

a. It provides a more scientific process for establishing instream flows (see Response No. 1).

b. Provides a system for coordinating with other government agencies – takes advantage of technical expertise available in other government departments.

c. Exposes each proposed action to legal review.

d. Involves major water users of an area in the planning process for the establishment of instream flows and closures.

e. Involves the public in general through a public participation process, including hearings.

f. Provides for periodic reviews of the program to determine effectiveness.

In addition to the above attributes, the IRPP updates and evaluates hydrological, water use, and water availability information on the State's surface water resources, and provides a basis for streamlining the permit system for issuing water rights. Closures indicate immediately that no more water is available for appropriation over and above the exempted uses. Instream flows serve as alerting mechanisms indicating when a stream reaches a state of stress.

90. It is necessary to understand that protection of the state's water resources is the primary purpose of the instream flow program. The department has a statutory obligation to allocate limited water resources among competing uses.

RCW 90.54.020(2) provides that, "allocation of waters among potential uses and users shall be based generally upon the securing of the maximum net benefits for the people of the state." (Emphasis added.)

Fisheries and other instream values are existing uses for which water must be reserved at a minimum level prior to allocating waters to "potential," or "proposed," or "future" uses.

RCW 90.564.020(3)(a) provides that, "Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values, and navigational values. Lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding consideration of the public interest will be served." (Emphasis added.)

It is apparent that the fisheries resources and the other instream values supported by a stream is assigned a high priority status by this legislation. Therefore, the department'' procedure in planning for future water utilization is first to protect existing rights, second, to set aside water needed by instream uses, and third, to allocate any remaining water to future uses.

RCW 90.54.020(1) lists both instream and consumptive uses declared to be beneficial uses. If you will refer to Response No. 1 and pages 23 – 31 of the Program document, you will see that the department has identified the instream and out-of-stream uses on the streams proposed for action and has worked hard to involve the related water users in the program.

91. It is the department's view that the maximum net benefits policy taking all the fundamentals of the Water Resource Act of 1971 into account, is intended to apply to the allocation to potential uses that portion of the water resources remaining after satisfaction of the base-flow requirement mandated by RCW 90.54.020(3)(a). See also Chapter 90.22 RCW.

92. The department does not consider the statutes in Chapter 90.54 RCW to be ambiguous. See Responses 88 and 89.

93. Agreed.

94. RCW 90.54.020 specifies the different uses to which water must be allocated as well as some of the considerations that are to be applied in making allocations. It does not state how determinations are to be made for those allocations nor specify the criteria upon which the decisions are to be made. The IRPP is designed to (a) generate biological, hydrological, sociological, (etc.) data upon which those decisions can be made, (b) evaluate the data and make the decisions, (c) provide a program for review by the public, and (d) develop administrative rules for implementation of the program. It is important to remember that the program only provides for protection and preservation of instream reasources. It does not, at this time, take further steps to determine allocations of water to potential uses.

95. Please refer to the references cited in the bibliography.

96. Please refer to Response No. 39.

97. The proposed rules include a provision requiring review at least once in every five year period, at which time the values will be evaluated for effectiveness and amended as necessary in accordance with new data. Our experience in administering minimum flows elsewhere in the state indicates that provisions such as those proposed for the Kitsap stream systems are very effective in meeting program objectives, i.e., the protection and preservation of instream resource values.

98. The IRPP does not prohibit public water systems or preclude development in areas where water is available to meet the proposed demands. Further, the department has no intention of preempting local government in the land use regulation business. The department makes decisions to establish instream flows or closure of streams based upon analyses of stream flows and the needs of instream resource values. Substate local governments must operate under the same laws as the state itself, and are therefore obliged to comply with the same laws as the state including the Water Resources Act and the Minimum Water Flows and Levels Act. See RCW 90.54.090.

99. Local land use plans and zoning ordinances do not customarily allow development in areas where there is no water supply. See Response No. 28.

100. Please see Response No. 8. Further, where there is no surface water available to meet a proposed use, public water suppliers usually investigate ground water availability. When there is no ground water available to meet the proposed demand, the water supplier cannot expand the capacity of an existing system, but must investigate other sources such as tieing into the lines of a municipal water supplier, water district, or another small supplier, if the water supplier's franchise allows for additional services. The Department of Social and Health Services or County Boundary Review Boards require comprehensive plans with proof of availability of water from an approved source and an approved system, prior to approval of a water supply system, or for an expansion to provide services over and above the original franchise capacity.

101. We disagree. Withdrawal of ground water is exempt from the Program when there is no significant hydraulic continuity between the proposed ground water source and a surface water body. Significant hydraulic continuity is determined on a case-by-case basis.

102. Yes. Please refer to:

> Department of Ecology Water Resources Management Division. 1980. Guideline for Determining Significant Hydraulic Continuity. Office Report No. 86, Stan Mahlum, P.E., Ray Newkirk and Gene Fox. Olympia, WA.

Copies are available at the Department of Ecology upon request.

103. At no time are diversions subject to the regulation permitted for any reason that cause the instream flows to fall below those specified, except where a declaration of overriding considerations of public interest is made by the Director. Also see Response No. 71.

104. Please see Response No. 8.

105. Please see page 2, "Public Involvement" and page 47, "WRIA 15 Water Suppliers."

106. Low-head hydropower projects are considered to be nonconsumptive (instream) uses when the powerhouse is sited at or near the foot of the dam. If the proposed dam would create an obstruction to existing runs of anadromous fish, fish passage facilities or an alternative site is likely to be required by the Federal Energy Regulation Committee (FERC).

When the proposed powerhouse site is some distance downstream from the proposed dam site, a flow by-pass area would be created that could result in adverse impacts on the stream and the fisheries resources unless adequate minimum flows are observed. Similarly, projects incorporating significant storage capable of altering the hydraulic regime or reducing flows to an unacceptable level require minimum flow releases.

The Department of Ecology, Department of Fisheries, Department of Game, and respective PUDs coordinate in investigative activities for the selection of the best alternative hydropower sites from the perspective of both fisheries and hydropower production, and to determine methods to mitigate impacts on instream resources, including determination of minimum flows.

107. We hope the above discussions have helped to alleviate your concerns.

108. In responding, it is necessary to define the underlying considerations for the department's policy for preparation of environmental impact statements in the Western Washington Instream Resources Protection Program (WWIRP). At the outset of the program, an evaluation was made of the overall program proposal to determine where it fitted into SEPA requirements. Findings were as follows:

a. The department as an acting agency, is proposing an "action" [WAC 197-10-040(1)]. That action is to establish instream flow protection measures for the streams of Western Washington.

b. The IRP Program does not propose an action that would "modify the physical environment," i.e., a project. [WAC 197-10-040-(2)(c)(i)] Consequently the Western Washington Instream Resources Protection Program is a "nonproject action."

   The proposed action does involve the adoption or amendment of legislation or rules that contain standards controlling the use of the physical environment. [WAC 197-10-040-(2)(c)(i)].

c. The proposed action of the IRP Program will "govern the development of a series of functionally related major actions" [WAC 197-10-040(2)(c)(iii)]. Those actions are the issuance of water rights in the future for use of the waters of the streams in Western Washington.

All of the above findings indicated that an environmental impact statement was appropriate for the Western Washington Instream Resources Protection Program.

At the time this decision was made, a threshold determination could have been omitted [WAC 197-10-300(2)(a) and (b)] and an environmental checklist would not have been required [WAC 197-10-300(3)]. The department realized that the IRP Program establishes instream flows by individual water resource inventory area (WRIA), and an overall programmatic EIS would not be adequate for all WRIAs. It was apparent that competing water use issues in some areas such as the Cedar-Sammamish, Snohomish, and Green-Duwamish water resource inventory areas could be best handled in supplemental EIS evaluations. For these IRP programs, the department determined that supplemental EISs were desirable to more specifically address some of the expected impacts.

Because of the lack of issues and expected adverse impacts of the IRP Program in some WRIAs, and the desire and necessity to stay within staff and budgetary means, the department decided to follow the guidelines in WAC 197-10-660(3) for the Water Resource Inventory Areas that do not require a supplemental EIS. This section provides that "when the new proposed action will not have an impact on the environment that is substantially different than the impacts of the earlier proposed action, the lead agency may prepare a written statement setting forth its determination under this subsection and circulate it as provided in WAC 197-10-600."

The department has complied with this stipulation in every IRP Program for which supplemental environmental impact statements were not prepared, including the Kitsap Instream Resources Protection Program.

109. These concerns were addressed under the Water and Energy sections of the Program Environmental Impact Statement. Analyses of the current known availability of water, and the current and projected municipal and industrial water use in the Kitsap WRIA did not indicate an inadequacy in the program EIS, nor any needed changes in the determinations. (See Response No. 108, paragraphs 12, 13, 14, 15, 17, and 18).

According to the latest U.S. Geological Survey study, "Groundwater Availability On The Kitsap Peninsula" (1980), the average annual ground water recharge to streams on the Kitsap Peninsula is 17 times the 1975 annual ground water pumpage for the Peninsula. This would indicate that some ground water is available for future demands, and would probably support small community systems in some areas.

Storage facilities on streams that can support them are not precluded by the IRP Program. Section 070, subsection (2) of the proposed rules provide for the approval of storage facilities, subject to the establishment of critical period flows for drought or low runoff periods.

See also Response No. 8.

110. These types of projects virtually always are required to protect an instream flow whether the flow has been previously determined or not. The departments of Ecology, Fisheries, Federal fisheries agencies, and Indian interests customarily intervene in Federal Energy Regulatory Commission proceedings to assure that instream values are protected and mitigation and compensation are granted. Investigation of large hydropower and M&I projects are done cooperatively by utilities, the Department of Ecology, departments of Fisheries and Game, Corps of Engineers, and others. As much as possible, site selection is based upon considerations for hydropower, fish habitat protection, and protection of the stream characteristics, including instream flows. In most cases consumptive water rights are issued with minimum instream flows included.

In the case of the Kitsap Water Resources Inventory Area, analysis did not indicate a necessity for a supplemental environmental impact statement. The programmatic EIS addressed these issues.

Also see Response No. 106.

111. This would depend on the proposed source and on whether hydraulic continuity exists between the proposed well and any streams in the area, as well as whether any of the streams have instream flows or closures. At any rate, permit investigations are done on a case-by-case basis. See responses 21, 24, 69, and 109.

112. Because of local land use policies, zoning ordinances, and the limited natural conditions of the local resources, the Kitsap Instream Resources Protection Program is not expected to adversely impact housing patterns in the Kitsap WRIA.

113. Local comprehensive land use plans and district zoning were analyzed during the research phase of the Kitsap Instream Program development (see Response No. 1(a). It was determined by the department that the Kitsap IRPP is not inconsistent with local land use plans, policies, or zoning ordinances. One of the basic criteria in the development of comprehensive land use plans is availability of water. The zoning ordinance is the tool by which land use is managed in order that the use can be sustained by the natural land and water resources.

RCW 90.54.020(3) directs that “Federal, state, and local governments, individuals, corporations, groups, and other entities shall be encouraged to carry out practices of conservation as they relate to the use of the waters of the state.” RCW 90.54.090 requires state, local governments, and municipal corporations to comply with the Water Resources Act of 1971.

Also see Response No. 98.

114. See Responses 8 26, 65, 98, 108, 109, and 112.

115. A statement of Economic Impact Analysis is on file at the Department of Ecology and may be viewed upon request. Public review and comment on the analysis is not required.

116. Please refer to responses 90 and 91.

117. The actions adopted under the Instream Resources Protection Program are not irreversible or irretrievable. The administrative rules of each WRIA program provide for review at least once in every five-year period (see WAC 173-515-100). Amendments or additions to the rules may be incorporated at that time or whenever necessary.

The Legislature has twice by statute required that instream values be protected. Delaying the implementation of this program would be in opposition to the apparent desires of the Legislature and the people of the state. See responses 1; 8; 21; 22, paragraph 4, 5, and 6; 24; 36, paragraphs 11 through 16; 37; 42; 65, paragraph 2; 71; 76; 77; 88; 91; 94; 98; 99; 100; 101; 106; 108; 109; and 110.

118. See Response Nos. 106 and 108.

119. Although we initially had trouble locating a copy of the draft EIS, your secretary was informed that a copy could be obtained at a cost of 10¢ per page to cover copying costs.

120. Instream flows and closures have been determined on a stream-by-stream basis. See response No. 1.b.

121. See Response 89, paragraph 6 and 7; 90, paragraph 2, 4, and 6; 91; 92; and 94.

122. See responses 90 and 91.

123. See all of the responses above.

W. <u>Mr. Peter E. Overton, Property Owner, Coulter Creek Watershed</u>

124. The department would like to thank you for your participation in developing instream flows for Coulter Creek. The packet of factual data which you provided has been incorporated into the official records of the Kitsap Instream Resources Protection Program as you requested.

In response to some of the concerns stated in your letter:

The appropriations by the Department of Fisheries for use in their hatchery do constitute senior water rights relative to subsequent appropriations. This is in accordance with a fundamental precept of western water law, i.e., “first in time is first in right.” Before the Fisheries water right permits were issued, the same three tests were considered just like any other water right proposal: (1) Is water available? (yes) (2) Would existing water rights be impaired? (no), and (3) Will the proposed use be detrimental to the public welfare? (no). Because the proposed Fisheries appropriation met these criteria, the permits were issued in accordance with state law.

The meeting you requested was held. The water flow data collected by your consultant during the late 1970s was very useful in supplementing the scarce USGS miscellaneous measurements. The proposed minimum flows for Coulter Creek have now been reduced to 13 cfs during the low flow period and 18 cfs during the high flow in consonance with the improved hydrologic data base. In addition, language has been added to the proposed rules that addresses the agreement between the Department of Fisheries and Coulter Creek landowners. (See WAC 173-515-030(1), p. A-6.)

See also responses 2; 4; 5; 6; 7; 8; 23; 24; ;90, paragraph 3, 4, and 5; 21; 24; 30; 65, paragraph 2; 75; 98; 99; and 100.

X. Richard W. Tyler, Fishery Biologist

125. Please refer to the following letter.

STATE OF
WASHINGTON

XXXXXXXXX
XXXXXXXXX
John Spellman
Governor

DEPARTMENT OF GAME

February 9, 1981

Ms. Jeanne Holloman
Kitsap Basin Planner
Department of Ecology (PV-11)
Olympia, Washington 98504

Dear Ms. Holloman:

125 Thank you for the opportunity to respond to Mr. Richard Tyler's letter to Mr. Peter Overton.

Mr. Tyler questioned several of the assumptions that I made in my memo to you dated February 11, 1980. I recognize the weaknesses of the assumptions and I have discussed the weaknesses and their consequences in a paper I presented at the 1980 annual meeting of the Western Division of the American Fisheries Society (attached – to be published Spring 1981). Sport catch may be less reliable as an index of run size in smaller streams than in larger streams, but no better measures of production were available. Similarly, it would have been preferable to have used flow data from Curley Creek, but none were available.

Mr. Tyler questioned my use of single lowest flow as an index of low flow. He suggested a mean of low flows are more representative. I have also discussed indices of low flow in the attached paper. I find no advantage and a distinct disadvantage to Mr. Tyler's suggested index of low flow. In his Table 1, he tabulated lowest daily flows and "mean low flow" in Big Beef Creek for 7 years. Not surprisingly, these two indices are highly correlated (r=.9918), so that use of one would not produce results greatly different than if the other were used. Use of single lowest daily flow is fairly objective. Use of mean low flow involves either a dubious assumption that the low flow period has the same duration and occurs at the same time each year, or else involves subjective decisions as to when the low flow period begins and ends each year.

In my memo to you, I merely highlighted a few of a number of correlations between Curley Creek steelhead catch and low flow in either Dewatto or Big Beef Creek. Noteworthy among the other correlations were those using a combined low flow index covering both Age 0+ and Age I+ rearing years. Correlations between Curley Creek catch and combined indices for both gage streams were positive (Dewatto flows: r=.8865, n=6, P<.05; Big Beef flow r=.5468, n-7, .25> P> .10).

Mr. Tyler has obtained Big Beef Creek cutthroat trout data with an additional year of data (1980). He has plotted data from 1976 as well as 1977-79, but determined that previous data were unreliable. According to Jim Johnston (Field Supervisor of Research, Fisheries Management Division, Washington Department of Game), who was familiar with the operation of Big Beef traps and has studied cutthroat extensively, 1976 data were questionable because of trap operation. In addition, Mr. Tyler's figure for lowest flow at Big Beef Creek in 1974 is nearly 6 times the lowest flow listed by U.S.G.S. for that year; this would drastically alter his analysis. Correction of this error in his Figure 1 would probably lead to an even higher correlation since the lower right hand point would fit quite well on the regression line of the other 4 points. (Another error in Tyler's Figure 1 is that the labels are reversed: The upper graph is one year before outmigration and the lower graph is two years before outmigration.)

Mr. Tyler's discussion of trout fecundity and smolt production shows a severe lack of understanding of fish ecology. Although not at the extremes of r-selection like some pelagic marine fishes, trout are still on the r-selection end of the r to K scale: trout have a relatively high fecundity as noted by Mr. Tyler. However, as is typical of r-selected species, only a very small fraction of the numerous offspring survive to maturity. The majority of mortality can occur at one or more bottlenecks. The remainder of the year-class which successfully passes through the bottleneck is unlikely to be further limited by density-dependent mortality; its population remains below carrying capacity.

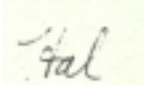
Low flows could affect trout in a number of direct and indirect ways. Many effects of low flows can be classified as density-dependent. Big Beef cutthroat may be an example of this. Age 0+ low flows are highly correlated with smolt production, but Age I+ low flows are not. It appears that low flows in Big Beef Creek severely limit Age 0+ cutthroat, that Age 0+ low flows are the bottleneck. Those fish that pass through the bottleneck are not greatly affected in their second summer (Age I+) because their numbers are below carrying capacity. Whether the bottleneck occurs at Age 0+ or Age I+ is probably a function of stream channel and flow regime.

Much remains to be done in assessing the roles of flow, competition, predation, water quality, and the interactions between these and other factors in determining trout production. Long-term studies, both observational and manipulative, are needed to elucidate these relationships. Work in progress at the Game Department's research stations on Snow Creek, Skagit/Samish, and Kalama River are making contributions in this area. If continued for another decade, they should make significant progress on developing models of anadromous trout population dynamics in streams.

In the final paragraph of Mr. Tyler's letter, he questioned the Game Department's minimum flow recommendations and indicates a preference for flow recommendations from the Department of Fisheries. I would like to point out that Department of Fisheries specifically refrained from making flow recommendations for Coulter Creek because of an agreement between Mr. Overton and the Department of Fisheries. It would be totally irresponsible to allow Coulter Creek to be totally dewatered. Surely no fishery biologist would deny the importance of protecting instream flows. The method used by the Game Department to determine instream flow needs was developed jointly with the U. S. Geological Survey for use in western Washington. It is an accepted method for this area.

Sincerely,

THE DEPARTMENT OF GAME



Hal A. Beecher, Ph. D.
Fish Ecologist
Applied Wildlife Ecology

HAB:mjf

Attachment