

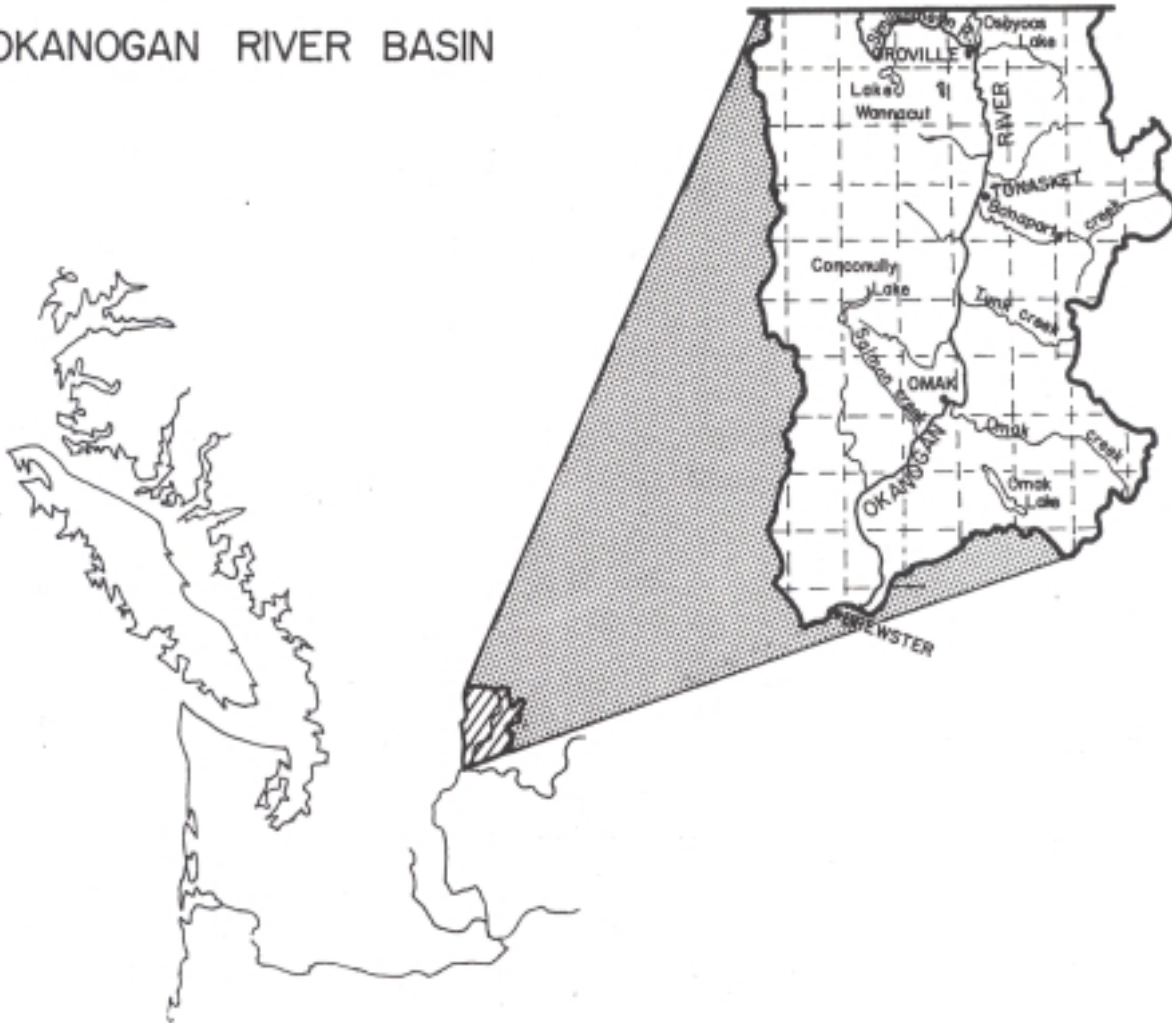


WATER RESOURCES MANAGEMENT PROGRAM



OKANOGAN RIVER BASIN

BASIN PROGRAM SERIES 3



July, 1976
OLYMPIA, WASHINGTON

DIXY LEE RAY
Governor

WILBUR G. HALLAUER
Director

BASIN PROGRAM SERIES NO. 3

WATER RESOURCES MANAGEMENT PROGRAM

OKANOGAN RIVER BASIN

(WATER RESOURCES INVENTORY AREA NO. 49)

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ABSTRACT

This document sets forth certain state management policies on water resources in the Okanogan River Basin. It is intended to provide a basis for making decisions on future water resource allocation and use.

The program (a) protects existing rights, (b) sets forth "base flows" necessary for preserving instream values, (c) establishes beneficial use preferences, (d) "closes" certain streams and natural lakes in the basin to further consumptive appropriation with certain exceptions for domestic and stockwatering uses, (e) establishes quantities of public water by stream management unit available for future appropriation, subject to the beneficial use priorities, and (f) sets forth water resources administrative procedures.

The Reference section lists sources of information on basin hydrologic conditions, stream flow characteristics, ground-water resources, recorded water rights and their actual uses, water quality information, and related long range multiobjective water resource opportunities.

Key Words: Okanogan River Basin water resources management; base flow; appropriation; allocation; public waters; public interest; closure; reservation; water rights.

INTRODUCTION

The policies recommended here result from the direction of the Water Resources Act of 1971 RCW 90.54 which directs the Department of Ecology to formulate a management and use program for the waters of the State of Washington. The policies recommended relate to the Okanogan Basin's hydrologic conditions with the current level of development and provide for future development, with appropriate protection of instream needs.

A great deal of credit must go to the Okanogan Basin Advisory Group which reviewed information over a three-year period and formulated basin goals which provided direction to this program, in addition to the "Level B" water resource plan and the Sewage Drainage Basin Plan. The advisory group consisted of Stanley P. Holt, chairman, Loretta Nansen, Arthur Olson, Charles Campbell, Dick Hendrick, Jerry Cooksey, Stanley Porter, Wilbur Hallauer, Irv Woods, Fred Balms, Bain Crofoot, and Wesley Gray.

Particular appreciation goes to Dick Thayer and Jim Thornton, two Okanogan natives who have worked in association with the Department of Ecology on this and other water resource planning activities.

Doug Clausing of the Department's Yakima office has provided valuable review comments and will be directly involved with the implementation of the Okanogan River Basin Water Resources Management Program.

SUMMARY

From the beginning of the water resources management planning process for the Okanogan River Basin, the guiding philosophy was that the citizens should define their present problems and concerns, and express their goals and aspirations for the basin's future.

On April 3, 1973, the purpose and objectives of a water resources management program were discussed at a public meeting in Okanogan. A standing citizens advisory committee was formed. Over the past three years more public meetings were held and the public was invited to express their concerns and thoughts about the future uses and development of the Okanogan Basin water resources.

In an effort to expand the base of opinions, a questionnaire concerning water allocation and future planning was mailed to all mailing addresses in the basin.

Along with efforts to inform the general public, regular contact was maintained with local government and state agencies. Technical assistance and guidance, when needed, was provided by staff of the Department of Ecology and other agencies.

As the citizens advisory committee gathered momentum, issues concerning water resource use and planning became more clearly defined. The committee's efforts culminated in basin policy statements (see Appendix, pages 23-25) that were printed as a full-page supplement in the basin's newspapers.

Taking the policy statements issued by the citizens advisory committee, the Washington State Department of Ecology, as directed by the State Legislature, prepared the Water Resources Management Program for the Okanogan River Basin. The management program is intended to provide a basis for making decisions on future water resource allocation and use.

The three-year effort by the Citizens Advisory Committee and the Department of Ecology resulted in the following preferences of beneficial use, with waters allocated to each, as well as implementing administrative procedures.

1. Preferences of beneficial use:
 - Priority I Existing Rights
 - Priority II Domestic Use
 - Priority III Base Flows
 - Priority IV Irrigation, Agricultural Industry Uses
 - Priority V Other Consumptive and Nonconsumptive Uses
2. Quantities of water identified with priorities II through V related specifically to remaining public waters available for future appropriation, both instream and out-of-bank.
3. Implementing administrative procedures.

The main conclusions of this work are:

1. Water is available for allocation, except that a firm supply is not available without associated storage.
2. The state should continue to work toward achieving environmentally sound multipurpose storage in the Okanogan Basin.
3. The state should continue to press the issue of resolving the relative interest in Okanogan River waters between the United States and Canada.
4. Most tributary streams to the Okanogan and Similkameen rivers are fully appropriated for major portions of the year.
5. Development projects and resource programs are set forth in an accompanying document entitled "Okanogan River Basin Level B Study."

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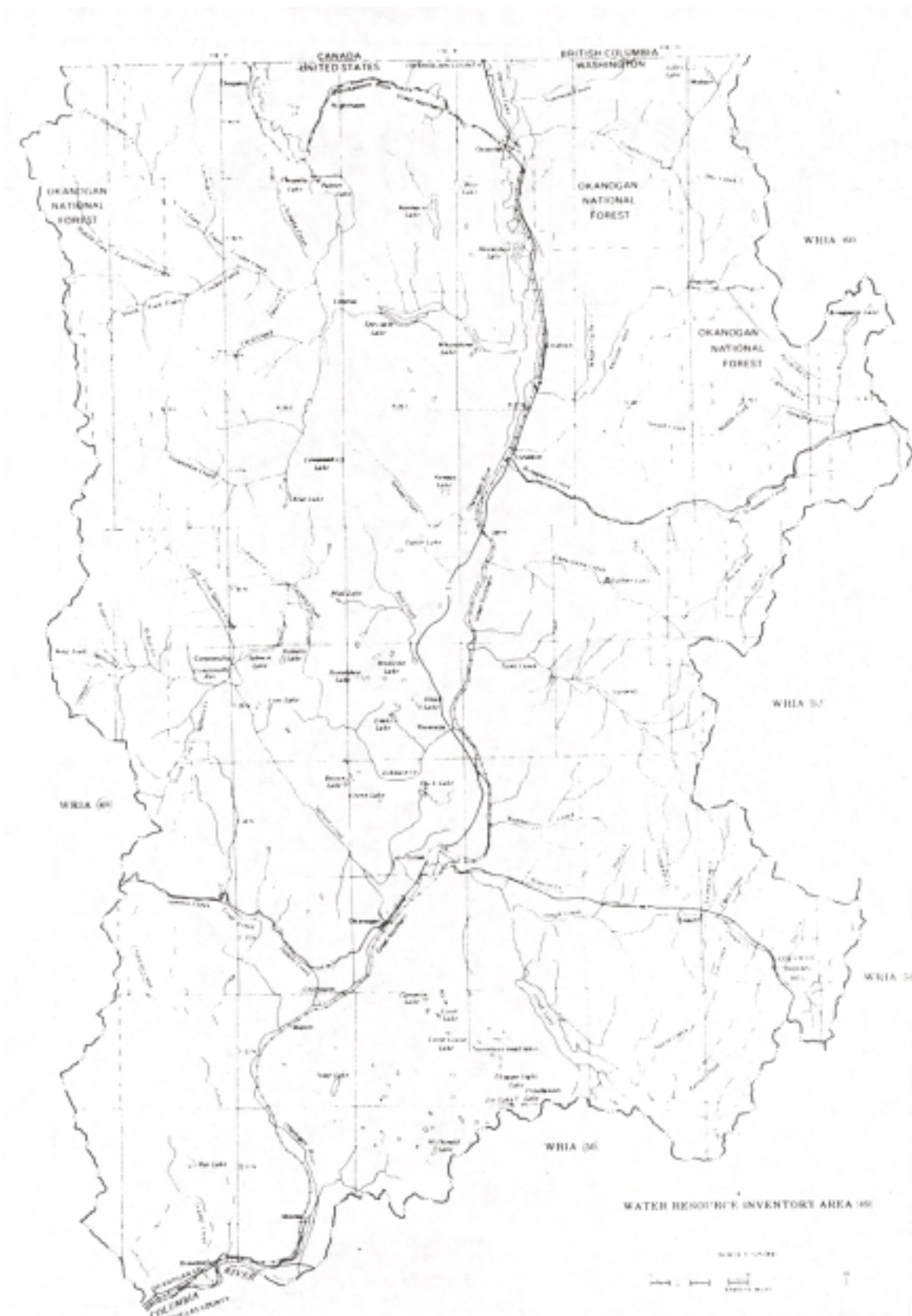
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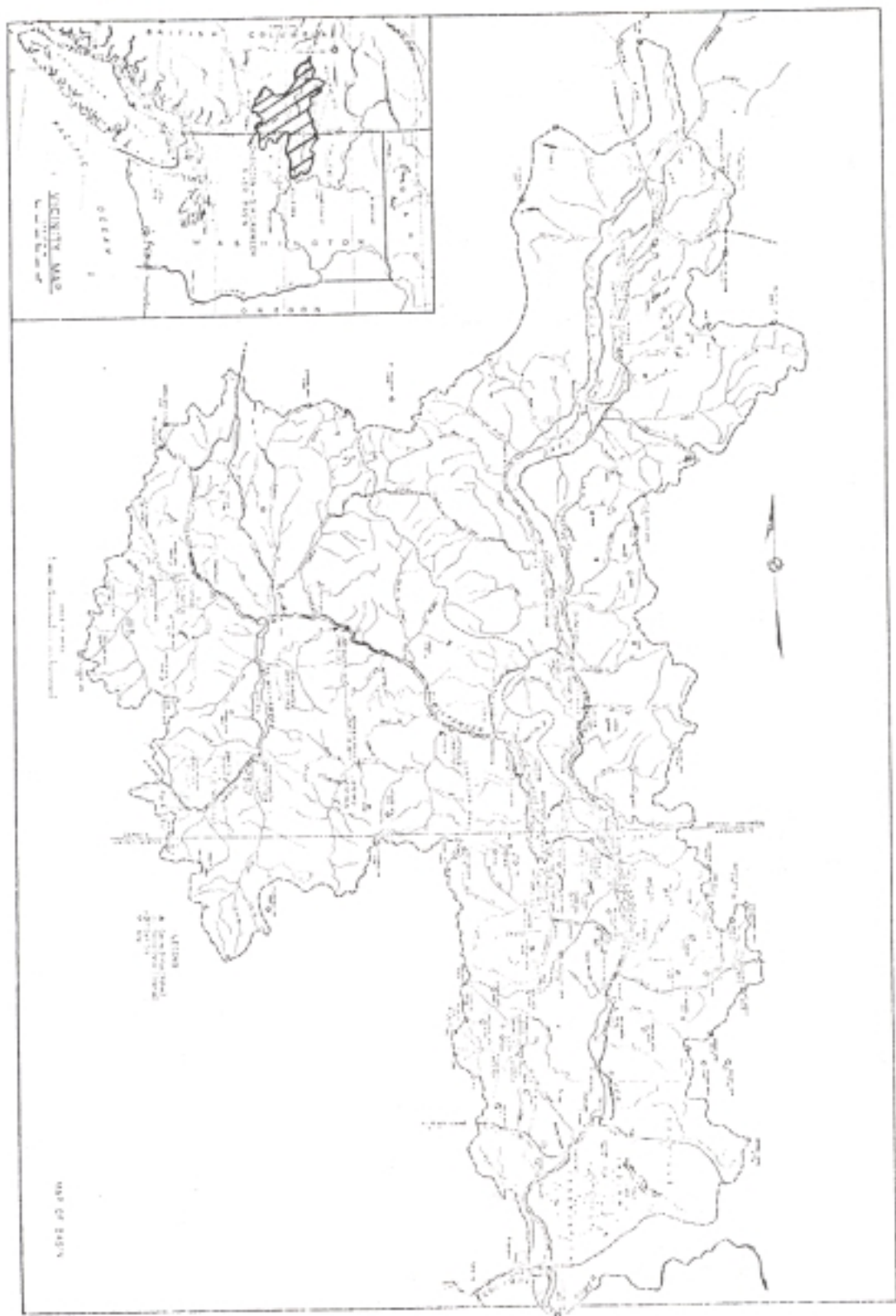
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PUBLIC CONCERNS

Indian Water Rights

Basin residents are concerned that, until Indian rights are determined and a specific quantity of water is established for the Indians from the Okanogan River, future water allocation and meaningful planning cannot be accomplished.

Some basin residents believe that the use of water by the Indians is unlikely in the near future, so why not utilize the water until the Indians are prepared to develop it.

Other residents are concerned that if the Indians do utilize water from the Okanogan River for irrigation, existing rights will be affected.

Non-Indians who own deeded land within the exterior boundaries of the reservation are concerned that their water rights issued by the state will no longer be honored by the state.

Indians are concerned that they will never have the opportunity to use their water rights because all the water from the Okanogan will be appropriated.

International Considerations

The majority of water flowing in the Okanogan River originates in Canada and is subject to Canadian use and management before it enters the United States. Basin residents have several concerns that involve international considerations regarding management and use in both countries. These concerns are:

- Flood control of the Similkameen River
- Storage of water in the Similkameen River for expansion of irrigation.
- Establishment of minimum flows into the U.S. in both the Okanogan and Similkameen rivers.
- Replacement of the Osoyoos Lake outlet control structure (Zosel Dam) with a capability of storing water in Osoyoos Lake.
- Establishment and maintenance of levels for Osoyoos Lake.

FACTUAL FINDINGS

Indian Water Rights

Generally, current State of Washington policy is to retain water filings that are for the appropriation of surface or ground water from sources within the exterior boundaries of the Colville Reservation or from waters occurring under, flowing through, or bordering on the Colville Indian Reservation for priority purposes only.

The Department of Ecology recognizes that Indian reserved rights are generally measured by the amount necessary for the-present and foreseeable future to carry out the purposes for which the Reservation was created.

The U.S. Supreme Court case of Arizona v California, established the principle that the measure-of the quantity of water to be reserved for future Indian agricultural use is based on the irrigable acreage test. 1/

State issued water rights are "subject to existing rights which includes the rights of the Indian tribe to the beneficial use of water in the stream both present and future." 2/

It is the policy of the state to recognize reserved Indian water rights.

International Considerations

Records indicate that an average of 2.1 million acre-feet of water enters the basin each year from Canada (including the contributions of the Pasayten and Ashnola) as surface water. Discharge from the basin, as represented by flows gaged at Malott, averaged 2.2 million acre-feet per year. Approximately 75 percent of the flow into the basin is from the Similkameen River, the other 25 percent from the Okanogan River.

The concerns as to relative interest in Okanogan waters between the U.S. and Canada expressed by U.S. citizens in the basin can only be resolved by the International Joint Commission. The Commission has-been requested by the State of Washington to do a detailed study of several of the outstanding issues regarding these waters. 3/

Contingency plans and/or designs have been or are being developed that would address these concerns if agreed upon by the participating entities..

Table 13, page 15 in the Appendix, represents the monthly inflow which may be expected under two alternative operations of the Canadian Okanogan.

PUBLIC CONCERNS

Domestic, Municipal, and Industrial Water Supply

As mentioned in paragraph 6, page 4, domestic wells have caused concern among basin residents who feel wells could endanger existing rights in some tributary valleys.

Much industry within the Okanogan Basin is associated with agriculture; however, as less water becomes available, concern is that other new industries may utilize water needed for agriculture and related industries.

Potential for mining within the basin comes closer to reality with each passing year. If mineral interests are developed, mines and associated facilities could become a major water user. Public concern is that water for mining not be allowed to endanger instream values or to receive a higher priority than agricultural related industry.

Agriculture/Irrigation

Agriculture within the Okanogan Basin depends primarily on irrigation and basin residents are concerned that expansion of irrigation is severely limited by late summer low flows. The concern over water supplies for additional irrigation involves international considerations if upstream storage is to be utilized.. (See "International Considerations," page 2.)

Agricultural land presently irrigated relies almost entirely upon district irrigation systems, all of which are in need of some form of rehabilitation. The systems are inefficient and experience high annual repair costs. These systems are a concern to present users and a deterrent to prospective irrigators.

There has been a trend toward the subdividing of large farms and ranches within the basin which has led to a decline in overall land being utilized for agricultural purposes. Basin residents have expressed concern that subdivision wells could endanger existing water rights in tributary valleys as well as depleting the agricultural land base.

FACTUAL FINDINGS

Domestic, Municipal, and Industrial Water Supply

Paragraph 6, page 4, is in reference to the increase in subdivided and/or platted land. Although there is no direct evidence in the Okanogan Basin of domestic uses affecting existing rights, the possibility does exist.

There are six industrial water dischargers in the Okanogan Basin that are not associated with agriculture.^{4/} The Okanogan Basin is economically dependent on agriculture. The preference assigned to beneficial uses places agriculture and related industries higher than most other consumptive users.

Recent increases in ore value, especially copper, have led to speculation into known or suspected mineral deposits in the Okanogan Basin. As prices for the ore increase, the chances that large-scale mining operations will be started also increases. As an industrial water user, mining operations have a lower priority than agriculture. Mining activities typically are small depleters of water, although sometimes requiring large diversions.

Agriculture/Irrigation

Presently 32,410 acres are irrigated in the Okanogan Basin and there are approximately 20,000 acres that are potentially irrigable. Data reveals that at present there is not a firm supply of water from the Okanogan River that can be relied upon to irrigate additional orchard development; however, there is water available for irrigation of crops not dependent on a firm supply of water in August and September. (Data is depicted in tabular form in the Appendix, tables 1 through 9, pages 3 through 11.) Dedicated storage for irrigation of approximately 80,000 additional acre feet would be required to meet all potential irrigation demands from storage alone. If natural flows were to be augmented by storage to provide a firm supply for irrigation, approximately 18,000 acre-feet would be required.

Of the 32,410 acres being irrigated, the majority are through irrigation districts. The Bureau of Reclamation has recently completed studies for rehabilitating the Oroville-Tonasket Unit (10,000 acres) and the Okanogan Unit (8,200 acres).^{5/}

A total of 129,000 acres (1974) have been subdivided, are unplatted subdivisions, or are held by land investment companies in Okanogan County.^{6/} This comprises 4.8 percent of the privately owned land. Many of these subdivided properties lie in tributary valleys; however, there is presently no documented evidence of domestic wells in this basin affecting existing rights.

The water balance for these basins has been developed and is found in Table 15, page 17 in the Appendix. The information, when combined with information on existing water rights and use, indicates clear cases of conflict. (Table 11, page 13 of the Appendix.)

PUBLIC CONCERNS

Fish and Wildlife

The preservation of anadromous and game fish is of concern to basin residents. However, no present rights to agricultural use of water should be compromised to maintain minimum flows favorable to fisheries.

Riparian habitats support the majority of wildlife populations. Basin residents are concerned that these habitats be maintained, but not if it would endanger existing agricultural uses.

Recreation

Recreation is placing demands on basin resources that are causing concerns among basin residents. The concerns relate to overuse and overcrowding of some areas and facilities.

Paragraph 6, page 4, addresses a resident concern over subdividing which is generally the result of an increasing demand for recreational property.

Increased water use and allocation are often associated with the increasing demand for recreational pursuits. There is a concern among some residents that recreational use of the water resources could limit the use of water for agriculture. Other residents, including resort owners and businessmen relying on tourism, are concerned over water management practices relating to recreational uses.

FACTUAL FINDINGS

Fish and Wildlife

The anadromous fisheries are an important part of the economy of the State of Washington. The Okanogan Basin is a major contributor of Sockeye and is one of the few remaining rivers contributing to the Columbia River Chinook salmon run. These and other fisheries values are preserved within the Okanogan Basin under the base flows set forth in this document; however, existing rights are not subject to the base flow. A comparison of the proposed base flows to fisheries' requested minimum flows are found in Table 12, page 14 in the Appendix. ⁷/ Riparian habitat is protected only as much as base flow will contribute to the entire riparian ecosystem. Base flows provide for retention of water to support stream bank vegetation and wildlife water needs.

RCW 90.54 specifies that base flows shall be retained in perennial streams of the State of Washington.

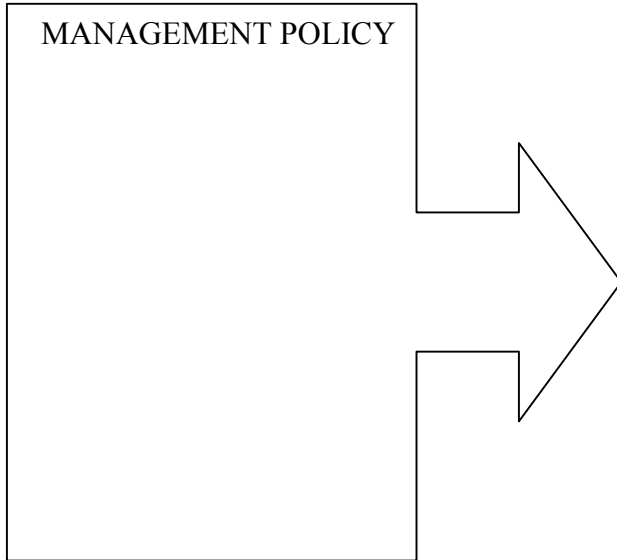
Recreation

The demand for recreational property is a stimulus for the increased subdividing of ranch and farm land. This trend has been accelerated by increased farm costs to farmers who no longer can profitably farm the land and find that land has a higher value to land speculators dealing in recreational properties or retirement mini-farms. Paragraph 6, page 5, addresses the concern over wells and surface water withdrawals on existing rights.

Recreational water use is generally limited to water sports (boating, swimming, etc.) and fish and wildlife values. These recreational water uses are also preserved by base flows and lake diversion limitations provided for in this document (page 12, paragraph 1 and Table 14, page 16 in the Appendix).

Current and potential agricultural use of water was a major consideration in the determination of the base flows and lake water use designations.

MANAGEMENT POLICY



II. WATER RESOURCES MANAGEMENT POLICY

Introduction

"The legislature finds that proper utilization of the water resources of this state is necessary to the promotion of public health and the economic well being of the state and the preservation of its natural resources and aesthetic values." RCW 90.54.010 Water Resources Act of 1971.

This management policy section provides for the protection of existing rights; allows for further irrigation; establishes base flows at flow control stations along the Okarogan River system; and indicates preference among uses. Most future water rights will be subject to these base flow levels.

This management policy also sets forth stream and lake closures to further appropriation, with exceptions for domestic and livestock uses, as appropriate.

All appropriation permits acted upon after implementation of this Program shall be subject to this Okanogan Basin water resources management program. **EXISTING WATER RIGHTS WILL NOT BE AFFECTED BY THE MANAGEMENT POLICIES.**

Declaration of Beneficial Use and Use Preferences

The State Water Resources Act of 1971 declares the following uses of water to be beneficial: domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state (RCW 90.54.020(1)).

Among these beneficial uses, the public views and current departmental investigations have led to the conclusion that actual demand for water may be segregated into use categories.

Management of the surface water resources of the Okanogan River will be in accordance with the following beneficial use preferences;

Priority I Existing rights. Nothing in this management policy will lessen, enlarge, or modify the existing water rights acquired by appropriation, or otherwise. Indian rights, when established as to volume, shall have the date of priority established by presidential proclamation which established the land as Indian land. Use priority between existing appropriative water rights has been established by the date of filing of the original application with the department (RCW 90.03.340) or as decreed through an adjudicative procedure in the Superior Court.

Indian use of Okanogan River water is deemed to constitute part of the existing rights. Quantification of the Indian's right to water is not made as a matter of policy in this document.

Priority II Domestic use, including irrigation of lawn and garden not to exceed one-half acre, and livestock use excluding feedlot operation. Therefore, water rights appropriated for domestic and stock watering use after adoption of this policy will not be subject to base flow.

However, such rights will be subject _to prior rights and, in designated watersheds, there may not be water available for additional rights for developed domestic and stock water use because of existing appropriations. Changes in purpose of use, point of diversion, and place of use may be executed as provided under RCW 90.03.380.

Priority III Base flows. For preservation of wildlife, fish, scenic, aesthetic, and other environmental values, instream flows shall be protected. Appropriation of future water rights to priority IV and V shall be limited so as not to impair maintenance of base flows in the stream. Established base flows recognize both the flow and use characteristics of the Okanogan River in their derivation.

Priority IV Irrigation and Agricultural Industrial Uses shall have preference over Priority V uses where conflicts arise.

Priority V All other Consumptive Uses which are not specified in the preceding priorities are grouped in Priority V.

Discussion

- A. Existing Rights: Existing rights are those certified rights to use water under the administrative process provided in RCW 90.03 effective June 6, 1917 or under court decree (adjudication). Other existing rights may be vested in nature and would be represented by a claim registered under RCW 90.14.050. These, however, may not be regulated, either for or against, unless confirmed under due process of a general adjudication.

Under the guidance of a number of U.S. Supreme Court cases, the State of Washington recognizes the interest and rights of the U.S. held in trust for the benefit of the Colville Confederated Tribes to water. Although a maximum irrigation potential may be used as a criteria for maximum water use, no attempt to limit the right of the Colville Confederated Tribes under this management plan is made.

- B. Establishment of Base Flows: It is a fundamental policy of this state that "perennial rivers and streams be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic, and other environmental values, and navigational values." (RCW 90.54.) Further, lakes and ponds are to be retained substantially in their natural condition.

In consonance with the above fundamental policy of the state, base flows for the Okanogan River and its tributaries are hereby established as an element of this management program.

No further appropriation of surface water shall be made from the Okanogan River and its tributaries which would conflict with the base flow levels established through this policy, except as expressly allowed. Enforcement and maintenance of base flows will be in accordance with the administrative procedures established as part of this program described on page 17 and existing laws.

Continuous discharge flow measurements at the Tonasket U.S. Geological Survey gaging station No. 12-4450 and snow survey data by the U.S. Soil Conservation service will provide the basis for monitoring flow levels for management purposes. Information from the Tonasket gage (RM 50.8) is telemetered and available on a "real time" basis.

The base flows will be monitored and maintained at the control stations for the stream reaches specified on Table A, page 13. Base flows for the first and fifteenth day of April through October are presented in Table A.

Base flows for any specific day not identified in the table can be obtained from Figure 2, page 15, Base Flow Hydrographs for the Okanogan River. Base flow hydrographs are drawn on a semilogarithmic daily record sheet.

C. Status of Streams and Lakes for Further Consumptive Appropriation: As a result of an investigation of water availability, certain tributary streams listed in Table 1,1 in the Appendix will be closed to further consumptive appropriation during the period specified. It is further declared to be prejudicial to the public interest to allow further appropriations from the streams listed in Table 11, page 13, for consumptive uses except for domestic and normal stock watering uses, excluding feedlot operations, during the period beginning May 1st and through October 31st, or as otherwise noted. The remaining public waters in those streams are necessary to maintain instream values. Average monthly flow data for tributary streams are presented in Table 15, page 17 in the Appendix.

In order to retain lakes substantially in their natural condition, no rights to appropriate water from the lakes and ponds in this basin (excluding lakes listed in Table 14) will be granted for any consumptive use except for domestic and stock watering purposes.

Diversion of surface water, which would conflict with 'the closures in this management policy shall be authorized only in those situations where it is clear that overriding consideration of the public interest will be served (Chapter 90.54.020(3)(2)RCW).

D. Allocation of Unappropriated Surface Waters: Unappropriated surface waters in the Okanogan River Basin are allocated in the following specific stream management units:

Lower Okanogan: Okanogan River confluence with Wells Pool to confluence of Chewiliken Creek.

Middle Okanogan: Okanogan River confluence of Chewiliken Creek to the confluence of Similkameen River.

Upper Okanogan: Okanogan River confluence of the Similkameen River to Osoyoos Lake.
Similkameen: Similkameen River mouth to the Canadian Border.

The unappropriated public surface waters are determined by subtracting the amount necessary to satisfy base flows and the estimated actual diversion impacts of existing rights from the appropriation limit established in this management program.

Unappropriated public waters of all management units are allocated to the following beneficial use categories:

- Domestic use and livestock watering.
- Base flow for instream uses up to the amount provided.
- Consumptive uses, except for domestic and indicated livestock use, nonconsumptive uses which require more than the amount provided as base flow.

Allocation quantities are presented in Table B with further information in tables 2 through 9.

TABLE A

SELECTED BASE FLOWS FOR APRIL THROUGH OCTOBER ONLY
(All figures in cubic feet per second)

Control Station Description		Months and Dates													
Station Name & No., Location, (River Mile) Sec., T., R.	Stream Management Unit	APR		MAY		JUN		JUL		AUG		SEP		OCT	
		1	15	1	15	1	15	1	15	1	15	1	15	1	15
<u>Lower Okanogan</u>															
Okanogan R. at Malott (12-4472-00) RIM 17.0	Confluence with Wells Pool to confluence with Chewiliken Cr.	1120	1250	1400	4000	4000	4000	2400	1400	1050	800	800	800	940	1100
<u>Middle Okanogan</u>															
Okanogan R. nr. Tonasket (12-4450.00) RM 50.8 8-36-27E	Confluence with Chewiliken Creek to confluence with Similkameen River	910	1070	1200	3800	3800	3800	2150	1200	840	600	600	600	730	900
<u>Upper Okanogan</u>															
Okanogan R. Oroville (12-4395-00) RM 77.3 27-40-27E	Confluence with Similkameen River to Osoyoos Lake	330	340	350	500	500	500	420	350	320	300	300	300	330	370
<u>Similkameen</u>															
Similkameen R. at Night Hawk (12-4425-00) RM 15.8	Confluence with Okanogan River to Canadian Border	510	640	800	3000	3000	3000	1650	900	590	400	400	400	450	500

Table B
 FUTURE ALLOCATION OF SURFACE WATERS IN USE-PRIORITY
 (WITHOUT STORAGE)
 April through September

(Units in cubic feet per second)

Use Priority	Use Description	APR	MAY	JUN	JUL	AUG	SEP
<u>Lower Okanogan</u>							
II	Domestic and Stock Use	10	10	10	10	10	10
III	Instream Use Under Base Flow	1250	4000	4000	1400	800	800
IV	Agriculture	130	130	130	130	91	0
V	Other Consumptive and nonconsumptive Uses	*	*	*	*	*	*
<u>Middle Okanogan</u>							
II	Domestic and Stock Use	10	10	10	10	10	10
III	Instream Use Under Base Flow	1070	3800	3800	1200	600	600
IV	Agriculture	130	130	130	130	130	130
V	Other Consumptive and nonconsumptive Uses	*	*	*	*	*	*
<u>Upper Okanogan</u>							
II	Domestic and Stock Use	10	10	10	10	10	10
III	Instream Use Under Base Flow	340	500	500	350	300	300
IV	Agriculture	60	60	60	0	0	0
V	Other Consumptive and nonconsumptive Uses	*	*	*	*	*	*
<u>Similkameen</u>							
II	Domestic and Stock Use	10	10	10	10	10	10
III	Instream Use Under Base Flow	640	3000	3000	900	400	400
IV	Agriculture						
V	Other Consumptive and nonconsumptive Uses	*	*	*	*	*	*

* Priority V, other consumptive and nonconsumptive uses, is the aggregate of water available up to the appropriation limit. The appropriation limit is as defined below.

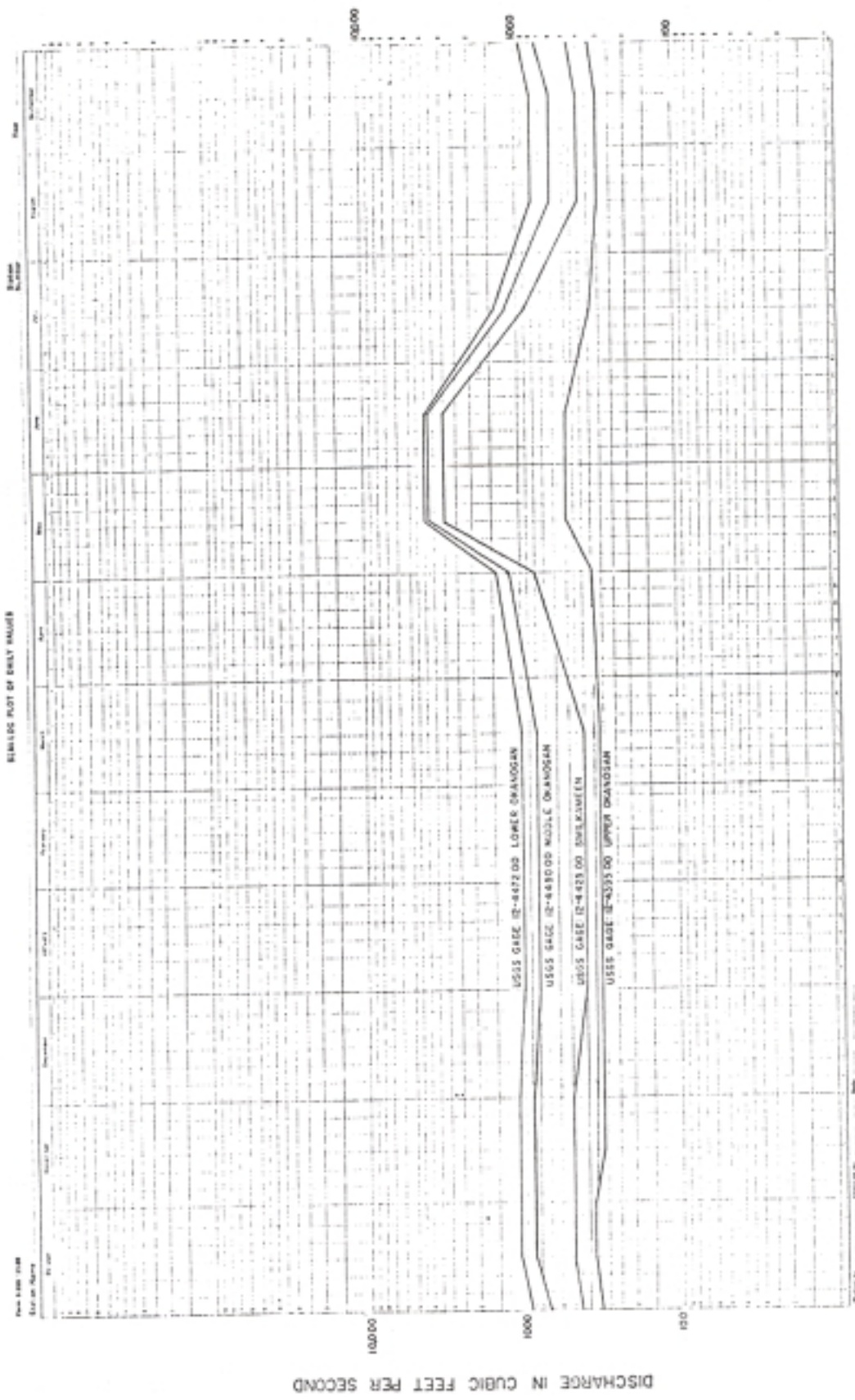
The above table is developed by assessing other information in this document and drawing the following conclusions:

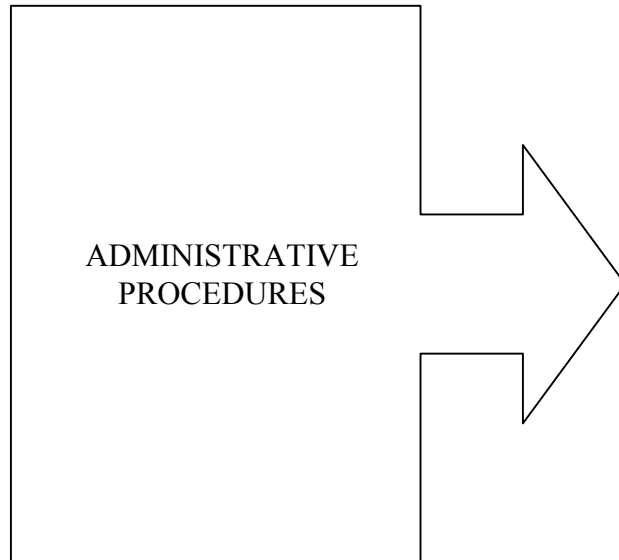
1. Future rights for domestic and stock water uses are not subject to base flows and 10 cfs is a reasonable maximum potential future use from each river reach noted.
2. Instream uses are adequately protected by the base flows which are set forth in representative terms.
3. Future rights for agricultural uses can be represented by either the reasonable maximum limit of available irrigation land or water.
 - a. Available future lands used;
 - i. Lower Okanogan 6,500 Acres
 - ii. Middle Okanogan 6,500 Acres
 - iii. Upper Okanogan 3,000 Acres
 - iv. Similkameen 1,000 Acres

17,000 Acres
 - b. Available water is represented by figures in Tables 2.A.1., (page 4) through 2.b.2., (page 11) in the Appendix.
4. Waters available in excess of those protected under existing rights and use priorities I through V of this table shall be limited by the appropriation limit defined generally as the one in two year reach discharge on a monthly basis.

This table is representative of the more critical part of the year only.

Figure II
 BASE FLOW HYDROGRAPHS FOR SELECTED STATIONS IN THE OKANOGAN RIVER BASIN





III. ADMINISTRATIVE PROCEDURES

Protection of Existing Rights

Nothing shall be done to infringe upon existing rights which are being used and not subject to the provisions of RCW 90.14 (Relinquishment). Indian Rights, developed and used at any time, shall be specifically protected as existing rights.

REGULATION OF BASE FLOW

All future consumptive water rights, except domestic and stock water supply (excluding commercial feedlots), will be subject to base flows at the designated control station. Therefore, all these rights will carry a provision that the holders will cease diverting from the stream when the flow falls below the level necessary to meet the base flow.

Early prediction of summer flow is required for adequate management. The prediction will be generally guided by the stream flow forecasts by the U.S. Soil Conservation Service, which are published as "Water Supply Outlook, Washington." The forecasts are based principally on measurements of the water-equivalent of snowpack. Snow surveys are made monthly or bimonthly from January 1 to June 1.

When a drought water year is anticipated, based on said forecasts, monitoring will be initiated by no later than May 15 of the year.

Administration of base flow will include the following procedures:

- A. Inform water right holders with low flow provisos of potential regulation by certified letter by May 15.
- B. Monitor Okanogan River at control station No. 12-4450 near Tonasket. Provisional flows are available by calling the U.S. Weather Service (503) 221-2914 in Portland.
- C. Prepare letters and notify the water users by certified mail as to required regulation.
- D. Assess compliance as required.
- E. Issue violators an administrative order to cease and desist from diversion, or post diversion depending on the situation.

* NOTE: The Water Code - 1917 Act, Sections 90.03.400 and 90.03.410, stipulated that unauthorized use of water and wrongful use of water is a misdemeanor.

If it is determined that development of a well affects surface water, it will be subject to existing surface water rights and base flow. If it is not certain at the time of investigation, the water right may be issued with a proviso to install a measuring device to collect information.

ISSUANCE OF FUTURE WATER RIGHTS AND ACCOUNTING

A system of accounting and recording, to keep track of water appropriation versus availability, is an essential part of this management program.

All consumptive water rights will be deducted from the amount specified in Table B, page 14, for each month in order to assess the amount of remaining water available for further appropriation.

Unappropriated surface waters have been allocated to specific stream management units and to specific use priorities within the unit. The principle of "first-in-time, first-in-right" will be applied on a basin-wide basis within the amount allocated to each stream management unit.

Allocations to use priorities II (domestic and stock water uses), IV (agricultural uses), and V (other consumptive uses) are defacto "reservations." Water rights from use priority V (other consumptive uses) allocation will be subject to the flow level necessary to maintain all higher priority uses.

After adoption of this management program and any subsequent management regulation, the approximately 60 applications for water right permits on "hold" will be processed up to the amount allowable in accordance with the procedures established in this management program. There are approximately 50 additional applications for water right permits affected by current litigation on the Colville Reservation. These shall not be acted upon until the pending litigation is concluded, except where action will serve to better define the relative authority between the state and the Colville Confederated Tribes.

All water right applications filed with the Department, but not permitted due to unavailability of water or otherwise, shall be listed in a water right application record. The listing is guided by Chapter 90.03.270 RCW (1917) - record of application. Priority date will be that date upon which the application is received in the Central Regional Office, Department of Ecology.

APPROPRIATION OF WATER FOR SINGLE DOMESTIC SUPPLY

Issuance of water rights for single domestic supply purposes will be guided by the following standard operating procedure:

- A. Refinement of the water right application is appropriate when the applicable facts are available. For example, if the applicant intends only to water his lawn and garden, the use should be designated "domestic supply lawn and garden watering only."
- B. On water sources where the availability of water is marginal, such as a stream that has been administratively closed to further appropriation for other than domestic supply or stock watering purposes, the following criteria will be used:
 1. If water is available from another source, the application for permit may be denied on the basis of highest feasible use of the remaining waters. This logic would prevail even for

household water, since denial would not be endangering health or welfare - rather, it would require the applicant to use as an alternate a more reliable source.

2. If water is not available from another source, the application may be approved for inhouse domestic supply only. The Department policy is that people are entitled to household water, but not necessarily to sufficient water to maintain a yard and/or garden necessary if such use would adversely affect existing water rights.

C. In any general adjudication, the expressed terms of the decree shall govern.

APPROPRIATION OF WATER FOR IRRIGATION PURPOSES

Appropriation of water for irrigation purposes will generally be guided by the criteria set forth in the following:

- A. In the field investigation of an application, the quantities of water allocated, as expressed in gallons per minute (gpm) or cubic feet per second (cfs) and acre-feet per year, will be determined and specified in the report of findings.
- B. To the extent possible, the intent of the applicant in the development of his irrigation program will be determined and be used as the basis for the water allocated by the permit.
- C. The field examiner shall determine the maximum acreage to be irrigated under the proposed project, as well as the segregation of this acreage into different crops. If an annual rotation program is to be followed by the applicant, the field examiner shall determine the breakdown of crops and associated acreages. Where there is uncertainty as to the rotation program, the field examiner shall allocate for what, in his judgment, might be expected to be the maximum use of water.
- D. Net irrigation water requirements for each crop shall be determined from the two-year frequency of occurrence table set forth in Station Circular 512 entitled "Irrigation Water Requirements Estimates for Washington," published by Washington Agricultural Experiment Station, College of Agriculture, Washington State University, November 1969. This frequency of occurrence is selected in recognition of the facts that the values reported (a) do not take into account those waters available to the crops at the commencement of the irrigation season as soil moisture storage and (b) are based upon maximum crop production where water is not the limiting factor.
- E. Water shall be allocated for the net irrigation water requirement of the crops, as well as for reasonable delivery and application losses. The following irrigation efficiencies shall be used for computing total irrigation water needs:

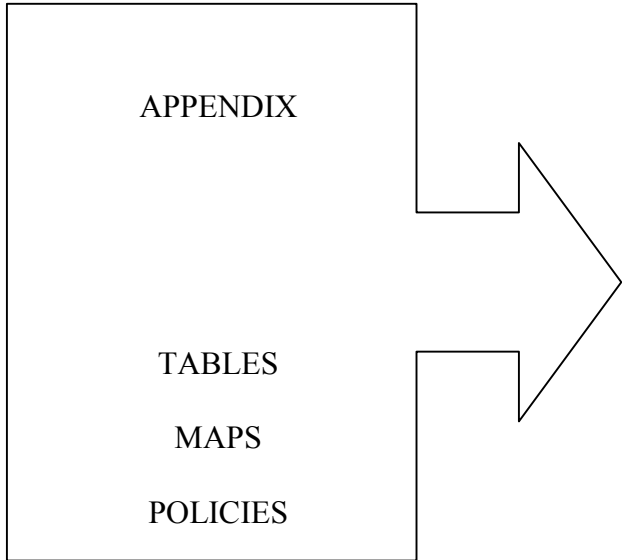
1. Sprinkler systems (pump at source of supply): 70 percent.
 2. Rill irrigation (at farm headgate): 65 percent.
- F. The rate of diversion or withdrawal is generally a maximum of 10 gpm per acre. Each variance must be tenable and must be explained on the report of findings preliminary to permitting action.
- G. The total annual allocation, as expressed in acre-feet per year, shall be calculated from the acreage to be irrigated and the type of each crop as adjusted (increased) by appropriate irrigation efficiency, taking into consideration subparagraph C and D of this section.
- H. In all instances, the maximum number of acres to be irrigated in any calendar year will be the controlling consideration in the allocation of water for irrigation purposes. This acreage will be associated with a specific parcel of land to be described on the permit.
- I. Pre- and post-irrigation will be considered to be beneficial irrigation uses. Water requirements for pre-irrigation purposes will be included in the net irrigation determination.
- J. The use of water for irrigation is limited to the amount of water, within the terms of the right, which can be beneficially applied to the number of acres identified in the water right. Therefore, acreage cannot be enlarged without acquiring an additional water right.

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STREAM MANAGEMENT REACHES
OKANOGAN BASIN

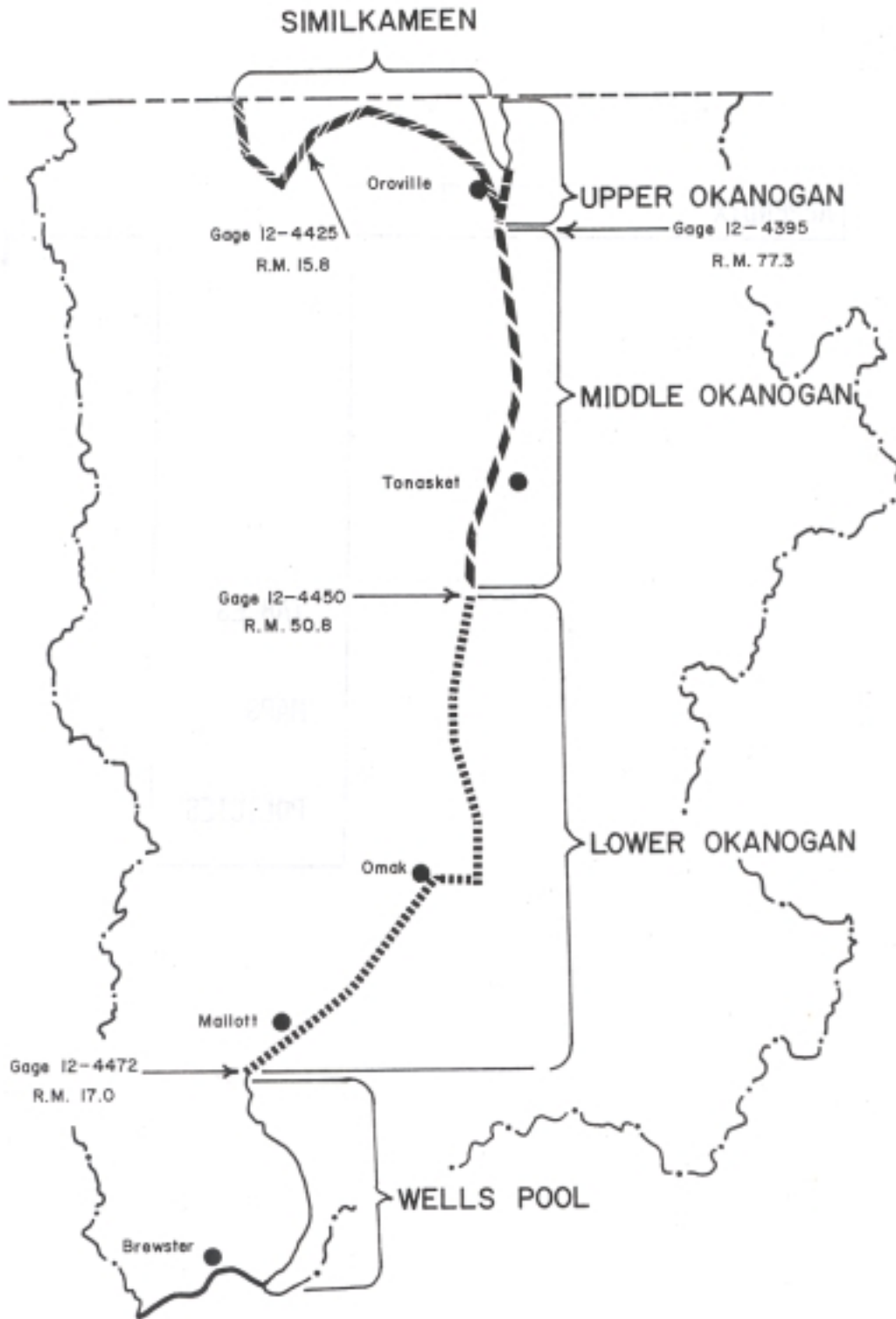


TABLE 1
ARABLE LANDS OKANOGAN BASIN
(Sprinkler Classification in Acres)

Watershed Name	CLASS II		CLASS III		CLASS IV		TOTALS		
	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Total
Tonasket Creek	100	-	500	3500	900	5400	1500	8900	10400
Similkameen River	100	-	400	300	1000	600	1500	900	2400
Upper Okanogan R.	1100	100	1700	800	2800	1000	5700	1900	7600
Spectacle Lake	1000	200	1800	900	2800	3000	5600	4100	9700
Siwash-Bonaparte C.	400	800	700	2400	1000	3700	2100	6900	9000
Toats Coulee Creek	-	-	250	100	600	600	850	700	1550
Pine Creek	-	-	100	600	100	1200	200	1800	2000
Tunk Creek Area	300	1500	500	3000	700	4800	1500	9300	10800
Johnson Creek	100	200	100	600	300	900	500	1700	2200
Conconully Lake	900	-	1800	100	2800	500	5500	600	6100
Lower Okanogan R.	300	1400	600	3300	1100	5800	2000	10500	12500
Omak Lake Area	-	100	100	3500	100	2700	200	6300	6500
Loup Loup Creek	300	-	600	300	900	300	1800	600	2400
Chiliwist Creek	100	-	100	100	300	900	500	1000	1500
Big Goose Lake Area	-	-	60	9000	-	18000	60	27000	27050
North Brewster Area	600	100	900	1200	1500	1800	3000	3100	6100
Totals	5300	4400	10210	29700	16900	51200	32410	85400	117810

Data obtained from Soil Conservation Service Tech-Me.-no. Titled: Okanogan-Methow Basin
Level B. Dated: August 1974

Table 2
FURTHER APPROPRIATION

DESCRIPTION: Lower Okanogan USGS GAGE: 12-4472.00 Malott
DATE: February 1976 RIVER MILE 17.0

(All figures in cubic feet per second)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
One in two year Discharge (Q_2) ¹	1337	1579	1425	1343	1660	1031	2483	8848	10763	3645	1436	1006
Base flow (Q_b) ²	1100	1100	1050	1000	1000	1000	1250	4000	4000	1400	800	800
$Q_2 - Q_b$	237	479	375	343	660	31	1238	4848	6763	2245	636	206
Estimate of present consumptive use impact ³	+42	+46	+50	+39	+35	0	-200	-570	-660	-560	-470	-230
Flow available for consumptive use ⁴	+279	+525	+435	+382	+695	+31	+1038	+4278	+6103	+1685	+166	0

1. Equivalent to natural flow based on 1943-1970 period of record.
2. Base flow for purposes of water availability is taken to be the mid-month (15th) base flow.
3. Base an average water use from Table 28, Reference 2 (see page 21) plus 40% (30% for greater than average use requirements + 10% for net activation of nonused existing rights) during net completion period. Signs indicate the direct relationship to stream flow.
4. Subject to base flow and existing rights, including nonquantified Indian rights.

Table 3
FIRM SUPPLY AVAILABLE¹

DESCRIPTION: Lower Okanogan USGS GAGE: 12-4472.00 Malott
DATE: February 1976 RIVER MILE 17.0

(All figures in cubic feet per second)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
One in two year Discharge ($Q_1/10$) ³	796	956	847	875	986	575	1338	5334	6028	2058,	924	656
Base flow (Q_b) ³	1100	1100	1050	1000	1000	1000	1250	4000	4000	1400	800	800
$Q_2 - Q_b$	-304	-144	-203	-125	-14	-425	+88	+1334	-12628	+658	+124	-144
Estimate of present consumptive use impact ⁴	+42	+46	+50	+39	+35	0	-200	-570	-660	-560	-470	-230
Flow available for consumptive use ⁴	0 (-262)	0 (-98)	0 (-153)	0 (-86)	+21	0 (-112)	0	+764	+1968	+98	0 (-346)	0 (-374)
Alternative Q^5	0	0	0	0	0	0	0	0	+614	+181	0	0

1. Firm supply is a supply which will be available 100% of the time for the indicated 9 years out of 10 years.
2. The one in ten year low discharge is that flow which is exceeded nine years out of ten, on the average, for the given month, based on the 1943-1970 period of record.
3. Base flow for the purposes of water availability is taken, to be the mid-month (15th) base flow.
4. Subject to base flow and existing rights, including nonquantified Indian rights.
5. Flow available in worst year out of ten for month shown with alternative irrigation use.

Table 4
FURTHER APPROPRIATION

DESCRIPTION: Okanogan: Middle Okanogan
DATE: February 1976

USGS GAGE: 12-4472.00 Near Tonasket
RIVER MILE 50.8

(All figures in cubic feet per second)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
One in two year Discharge (Q_b) ¹	1398	1580	1456	1308	1638	1038	2619	9386	11083	3852	1458	966
Base flow (Q_b) ²	900	900	850	800	800	800	1070	3800	3800	1200	600	600
$Q_2 - Q_b$	+498	+680	+606	+508	+838	+238	+1549	+5586	+7283	+2652	858	366
Estimate of present consumptive use impact ³	+27	+44	+46	+36	+31	+16	-90	-356	-423	-462	-424	-202
Proposed flow available for further consumptive use	525	+724	+652	+544	+869	+254	+1459	+5230	+6860	+2190	+434	+164

1. "Upper Sound" is selected to be the monthly flow exceeded one year out of two years from data (1943-1970) adjusted for depletion impacts, but including 1970 level of Canadian Development.
2. Base flow for purposes of water availability is taken to be the mid-month (15th) base flow.
3. Based on average water use from Table 25, Reference 2 (see page 21) plus 40% (30% for greater than average use requirement + 10% for net activation of nonused existing rights) during net depletion period. Signs indicate direct relationship to stream flow.

Table 5
FIRM SUPPLY AVAILABLE¹

DESCRIPTION: Okanogan: Middle Okanogan
DATE: February 1976

USGS GAGE: 12-4472.00 Malott
RIVER MILE 50.8

(All figures in cubic feet per second)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
One in ten year low Discharge $(Q_i/10)^2$	766	888	799	812	907	514	1266	5250	6371	1968	881	630
Base flow $(Q_b)^3$	900	900	850	800	800	800	1070	3800	3800	1200	600	600
$(Q_i/10) - Q_b$	-134	-12	-51	+12	+107	-286	+196	+1450	+2571	+768	+281	+30
Estimate of present consumptive use impact ⁴	+27	+44	+4b	+36	+31	+16	-90	-356	-423	-462	-424	-202
Flow available for consumptive use ⁴	0 (-107)	+32	0 (-5)	+48	+138	0 (-270)	+106	+1094	+1148	+306	0 (-143)	0 (-172)
Alternative Q ⁵	0	0	0	0	0	0	0	+944	-998	+156	0	

1. Firm supply is a supply which will be available 100 of the tire for the indicated 9 years out of 10 years.
2. The one in ten year discharge is that flow which is exceeded nine years out of ten, on the average, for the given month.
3. Base flow for purposes of water availability is taken to be the mid-month (15th) base flow.
4. Based on average water use from Table 25, Reference 2 (see page 21) plus 40% (30% for greater than average use requirement + 10i for net activation of nonused existing rights, during net depletion period. Signs indicate. direct relationship to strew flow.
5. Flow available in worst year out of ten for month shown with alternative irrigation use.

Table 6
FURTHER APPROPRIATION

DESCRIPTION: Upper Okanogan USGS GAGE: 12-4395.00 Oroville
DATE: September 1975 RIVER MILE 77.3

(All figures in cubic feet per second)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
One in two year Discharge (Q_b) ¹	507	513	506	536	736	152	703	928	800	302	230	264
Base flow (Q_b) ²	370	320	320	320	320	320	340	500	500	350	400	300
$Q_2 - Q_b$	+137	+193	+186	+216	+416	-178	+363	+428	+300	-48	-70	-36
Estimate of present consumptive use impact ³	+10	+7	+6	+6	+5	+4	+4	+8	+11	+12	+10	+10
Flow available for consumptive use	+147	+200	+192	+222	+421	0 (-174)	+367	+436	+311	0 (-36)	0 (-60)	0 (-26)

1. "Upper Bound" is selected to be the monthly flow exceeded one year out of two years from data (1943-1970) adjusted for depletion impacts, but including 1970 level of Canadian Development.
2. The one in ten year discharge is that flow which is exceeded nine years out of ten, on the average, for the given month, based on the 1943-1970 period of record.
3. Net positive impact from importation from Similkameen Basin.

Table 7
FIRM SUPPLY AVAILABLE¹

DESCRIPTION: Upper Okanogan USGS GAGE: 12-4395.00 Oroville
DATE: February 1976 RIVER MILE 77.3

(All figures in cubic feet per second)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
One in ten year low Discharge $(Q_1/10)^2$	245	239	231	252	291	40	274	398	336	164	141	206
Base flow $(Q_b)^3$	370	320	320	320	320	320	340	500	500	350	300	300
$(Q_1/10) - Q_b$	-12	-81	-89	-68	-29	-280	-66	-102	-164	-186	-159	-94
Estimate of present consumptive use impact ⁴	+10	+7	+6	+6	+5	+4	+4	+8	+11	+12	+10	+10
Flow available for consumptive use	0	0	0	0	0	0	0	0	0	0	0	0
Alternative Q	0	0	0	0	0	0	0	0	0	0	0	0

1. Firm supply is a supply which will be available 100% of the time for the indicated 9 out of 10 years. Period of record analyzed is 1943-1970.
2. The one in ten year discharge is that flow which is exceeded nine years out of ten, on the average, for the given month.
3. Base flow for purposes of water availability is taken to be the mid-month (15th) base flow.
4. Net positive impact from importation from Similkameen Basin.

Table 8
FURTHER APPROPRIATION

DESCRIPTION: Similkameen
DATE: February 1976

USGS GAGE: 12-4425.00 Malott
RIVER MILE 15.8

(All figures in cubic feet per second)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
One in two year Discharge (Q_b) ¹	711	851	727	604	632	519	1501	8059	9335	3045	1041	633
Base flow (Q_b) ²	500	500	450	400	400	400	640	3000	3000	900	400	400
$Q_2 - Q_b$	+211	+351	+277	+204	+232	+219	+861	+5059	+6335	+2145	+641	+233
Estimate of present consumptive use impact ³	+18	+13	+15	+13	+12	+1	-45	-174	-213	-213	-185	-43
Flow available for consumptive use	+229	+364	+292	+217	+244	+220	+816	+4885	+6122	+1932	+455	+190

1. "Upper Sound" is selected to be the monthly flow exceeded one year out of two years from data (1943-1970) adjusted for depleted impacts.
2. Base flow for purpose of water availability is taken to be the mid-month (15th) base flow.
3. Based on average water use from Table 22, Reference 2 (see page 21) plus 40% (30% for greater than average use requirement + 10% for net activation of nonused existing rights) during net depletion period. Signs indicate direct relationship to stream flow.

Table 9¹
FIRM SUPPLY AVAILABLE¹

DESCRIPTION: Similkameen
DATE: February 1976

USGS GAGE: 12-4425.00 Malott
RIVER MILE 15.8

(All figures in cubic feet per second)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP
One in ten year low Discharge $(Q_1/10)^2$	409	454	377	373	386	413	780	5055	578D	1659	627	356
Base flow $(Q_b)^3$	500	500	450	400	400	400	640	3000	3070	900	400	400
$(Q_1/10) - Q_b$	-91	-46	-73	-27	-14	+13	+140	+2055	+2780	+759	+277	-34
Estimate of present consumptive use impact ⁴	+18	+13	+15	+13	+12	+1	-45	-174	-213	-213	-185	-43
Flow available for consumptive use	(-73)	0 (-33)	0 (-58)	0 (-14)	0 (-2)		+95	+1881	+2567	+546	+42	0 (-77)
Alternative Q ⁵	0	0	0	0	0	0	0	+1751	+2437	+436	0	0

1. Firm supply is a supply which will be available 1001 of the time for the indicated 9 out of 10 years. Period of record analyzed is 1943-1970.
2. The one in ten year discharge is that flow which is exceeded nine years out of ten, on the average for the given month.
3. Base flow for purposes of water availability is taken to be the mid-month (15th) base flow.
4. Based on average water use from Table 29, Reference 2 (see page 21) plus 407 (3DI of greater than average use requirement + 10% for net activation of nonused existing rights) during net depletion period. Signs indicate direct relationship to stream flow.
5. Flow available in worst year out of ten for months shown with alternative irrigation use.

TABLE 10
EXISTING AND POTENTIAL RESERVOIRS IN THE OKANOGAN BASIN

<u>Existing Reservoirs</u>			
<u>Reservoir Name</u>	<u>Stream Location</u>	<u>Storage (ac ft)</u>	<u>Surface Area (acres)</u>
Aeneas	Aeneas Creek	--	--
Blue	Sinlahekin River	--	--
Conconully	Salmon Creek	13,000	--
Leader -- 5,312 --			
Osoyoos	Okanogan River	--	5,729 (2,076 in US)
Palmer	Sinlahekin R.	--	2,063
Salmon	Salmon Creek	10,500	--
Spectacle	Spectacle Cr.	6,250	--
Whitestone	Spectacle Cr.	3,144	--

Source: County Extension Agent.

<u>Potential Reservoirs</u>	
Nighthawk	Similkameen River
Palmer Lake	Palmer Creek
Shankers Bend	Similkameen River
Similkameen (2 additional sites)	Similkameen River
Osoyoos Lake	Okanogan River
McLaughlin Falls	Okanogan River
Scotch Lake	Scotch Creek
Brown Lake	Johnson Creek
Green Lake	Salmon Creek
Omak-Goose Lakes	Natural Lakes

Source: Mineral and Water Resources of Washington, USGS, 1966.

TABLE 11
THIRD AND FOURTH ORDER STREAMS
CURRENT AND PROPOSED STATUS

April 1976

<u>Stream*</u>	<u>Adjudicated</u>	<u>Proposed Status</u>	<u>Remarks</u>
Similkameen River	1917	See Table 2d1	First adjudicated stream under 1917 water code. Use governed by 1961 treaty with Canada.
Johnson Creek	1925	Closed all year	Cause No. 6126; filed February 17, 1925
Chiliwist Creek	1970	Closed May 1 to Oct 1	Cause No. 16323; filed January 24, 1964
Salmon Creek	1925	Closed all year	Cause No. 6318; filed September 17, 1925
Loup Loup Creek		Closed all year	
Scotch Creek		Closed May 1 to Oct 1	
Tallant Creek		Closed May 1 to Oct 1***	
Pine Creek		Closed May 1 to Oct 1	
Aeneas Creek	1967/1925	Closed all year	Cause No. 1259; filed September 13, 1969/Cause 6220
Whitestone Lake & Creek	1925	Closed all year	Cause No. 13945; filed February 21, 1955
Antoine Creek	1925	Closed all year	Cause No. 6813; filed March 5, 1927 Embraces only that part of Antoine Creek lying within Sec. 27, Sec. 34 and Sec. 35 and all of T.38N., R27E.
Bonaparte Creek	Incomplete	Closed May 1 to Oct 1	Cause No. 17787; filed February 18, 1969
Toats Coulee Creek		Closed all year	Federal withdrawal August 9, 1966
Sinlahekin Creek	1928	Closed all year**	Cause No. 7310; filed August 17, 1928
Nine Mile Creek		Closed all year	
Whiskey Cache Creek		Closed all year	
Siwash Creek		Closed all year	
Chewiliken Creek		Closed May 1 to Oct 1**	
Tunk Creek		Closed May 1 to Oct 1	
Tonasket Creek		Closed May 1 to Oct 1**	

* Including tributaries.

** Exception to closure made for domestic and stock water.

*** Except Tallant Creek south of the north line of Sections 34 and 35, T.33 N., R25 E.W.M. The status of lower Tallant Creek is dependent upon further investigation and evaluation to assess it's return flow characteristics.

Table 12

INSTREAM FLOW COMPARISON
(All figures in cubic feet per second)

Month	Okanogan River at Oroville		Similkameen River at Nighthawk		Okanogan River at Tonasket		
	G & F*	Base**	G & F	Base	G & F	Base Above Tonasket	Below Tonasket
January	350	320	650	400	1000	800	1000
February	350	320	650	400	1000	800	1000
March	350	320	650	400	1000	800	1000
April	375	340	875	640	1250	1070	1250
May	825	500	1925	3000	2750	3800	4000
June	550	500	3450	3000	4000	3800	4000
July	375	350	1125	900	1500	1200	1400
August	400	300	600	400	1000	600	800
September	400	300	600	400	1000	600	800
October	400	370	600	500	1000	900	1100
November	450	320	800	500	1250	900	1100
December	450	320	800	450	1250	850	1050

* From letter dated June 2, 1970, from Departments of Fisheries and Game.

** Taken at the mid-month point.

TABLE 13

CANADIAN INFLOW*

Mean Monthly Flows in
Cubic Feet Per Second

Water Year	EXISTING (1970 Conditions in British Columbia Operation Study 00)	ALTERNATIVE (Operation Study 03)
October	581	205
November	592	967
December	591	929
January	618	956
February	873	879
March	290	309
April	912	801
May	1132	1044
June	990	987
July	341	223
August	252	79
September	269	91

*Okanogan at Oroville

TABLE 14

LAKES WITH EXISTING OR POTENTIAL STORAGE*

NAME	ACRE FEET	REMARKS
Aeneas Lake		
Blue Lake		
Conconully (Salmon) Lake	10,500	
Conconully Reservoir	13,000	
Duck Lake		
Fancher Lake	500	
Forde	52	Water right certificate 3568
Leader Lake	5,312	Water right certificate 506
Lemanski Lake		
Osoyoos Lake	11,400**	2036 surface acres within the U.S.
Palmer Lake	2,063**	
Sinlahekin Impoundments	304	Water right certificate 4085
Spectacle Lake	6,250	Water right certificate 2207
Whitestone Lake	3,144	Water right certificate 5317
Zosel's Mill Pond	126	Water right certificate 5566

All lakes not listed above are restricted to uses for domestic and stock watering only.

*RCW 90.54.020 3a. ... Lakes and ponds shall be retained substantially in their natural condition ...

**For two feet of potential storage at elevation range 912+MSL.

TABLE 15
ESTIMATED "NATURAL" MONTHLY FLOW, RIGHTS, AND USE IN CFS AT MOUTH OF 15 STREAMS

Stream	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR
Ninemile Creek ^{1/}	1.4	1.4	1.4	1.4	2.1	4.3	7.0	29.8	22.7	7.1	3.6	2.1	7.1
Total Rights/Month ^{2/}							9.7	9.7	9.7	9.7	9.7	9.7	
Use Rights/Month							2.91	8.34	9.7	8.25	6.89	3.4	
Actual Use/Month							6.73	19.30	22.44	19.07	15.93	7.85	
Tonasket Creek ^{1/}	2.7	2.7	2.7	2.7	4.0	8.0	14.6	55.9	42.6	13.3	6.6	4.0	13.3
Total Rights/Month							3.27	3.27	3.27	3.27	3.27	3.27	
Use Rights/Month							.98	2.80	3.27	2.78	2.32	1.15	
Actual Use/Month							2.27	6.5	7.56	6.43	5.37	2.65	
Sinlahekin Creek ^{1/}	29.0	27.8	25.0	24.9	25.7	27.3	37.8	303	240	65.4	30.8	25.4	67.2
Total Rights/Month							404.2	404.2	404.2	404.2	404.2	404.2	
Use Rights/Month							121.3	347.6	404.2	343.6	286.98	141.47	
Actual Use/Month							3.17	9.08	10.56	8.98	7.50	3.70	
Whitestone Creek ^{4/}	0.7	0.7	0.7	1.1	1.7	3.0	5.6	16.6	9.2	2.6	1.5	0.7	3.7
Total Right/Month							21.25	21.25	21.25	21.25	21.25	21.25	
Use Rights/Month							6.38	18.28	21.25	18.06	15.09	7.44	
Actual Use/Month							17.54	50.28	58.46	49.69	41.51	20.46	
Antoine Creek ^{5/}	3.2	3.2	3.2	3.2	4.9	9.7	17.8	68.0	51.8	16.2	8.1	4.9	16.2
Total Rights/Month							9.99	9.99	9.99	9.99	9.99	9.99	
Use Rights/Month							3.0	8.59	9.99	8.49	7.09	3.50	
Actual Use/Month							9.83	28.35	32.96	28.02	23.40	11.54	
Siwash Creek ^{5/}	2.1	2.1	2.1	2.1	3.1	6.2	11.3	43.3	33.0	10.3	5.2	3.1	10.3
Total Rights/Month							3.88	3.88	3.88	3.88	3.88	3.88	
Use Rights/Month							1.16	3.34	3.88	3.30	2.75	1.36	
Actual Use/Month							1.95	5.58	6.49	5.52	4.61	2.27	
Aeneas Creek ^{4/}	0.2	0.2	0.2	0.3	0.5	0.8	1.5	4.5	2.5	0.7	0.4	0.2	1.0
Total Rights/Month							3.51	3.51	3.51	3.51	3.51	3.51	
Use Rights/Month							1.05	3.02	3.51	2.98	2.49	1.23	
Actual Use/Month							2.90	8.31	9.66	8.21	6.86	3.38	

TABLE 15 (continued)
ESTIMATED "NATURAL" MONTHLY FLOW, RIGHTS, AND USE IN CFS AT MOUTH OF 15 STREAMS

Stream	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	YEAR
Chewiliken Creek ^{6/}	0.4	0.4	0.4	0.4	0.6	1.1	2.1	8.0	6.1	1.9	1.0	0.6	1.9
Total Rights/Month ^{2/}							---	---	---	---	---	---	
Use Rights/Month							---	---	---	---	---	---	
Actual Use/Month							---	---	---	---	---	---	
Tunk Creek ^{6/}	1.1	1.1	1.1	1.1	1.6	3.2	5.8	22.3	17.0	5.3	2.6	1.6	5.3
Total Rights/Month							1.33	1.33	1.33	1.33	1.33	1.33	
Use Rights/Month							.40	1.14	1.33	1.13	.94	.47	
Actual Use/Month							9.0	25.8	30.0	25.5	21.3	10.5	
Johnson Creek ^{1/}	5.3	6.5	7.7	6.2	7.1	8.5	10.3	6.7	5.7	4.7	3.4	4.9	6.4
Total Rights/Month							15.56	15.56	15.56	11.56	15.56	15.56	
Use Rights/Month							4.67	13.38	15.56	13.23	11.05	5.45	
Actual Use/Month							3.0	8.6	10.0	8.5	7.1	3.5	
Salmon Creek	14.2	17.7	13.1	10.8	11.1	20.6	80.1	162.0	164.0	44.6	25.9	15.9	48.9
Total Right/Month							15.97	15.97	15.97	15.97	15.97	15.97	
Use Rights/Month							4.79	13.73	15.97	13.57	11.34	5.59	
Actual Use/Month							33.0	94.6	110.0	93.5	78.1	38.5	
Tallant Creek ^{7/}	0.1	0.1	0.1	0.1	Q.2	0.3	0.6	1.8	1.0	0.3	0.2	0.1	0.4
Total Rights/Month							6.54	6.54	6.54	6.54	6.54	6.54	
Use Rights/Month							1.96	5.62	6.54	5.56	4.64	2.29	
Actual Use/Month							5.97	17.11	19.89	16.91	14.12	6.96	
Loup Loup Creek ^{7/}	1.9	1.9	1.9	1.9	2.8	5.7	10.4	39.9	30.4	9.5	4.8	2.8	9.5
Total Rights/Month							5.30	5.30	5.30	5.30	5.30	5.30	
Use Rights/Month							1.59	4.56	5.30	4.51	3.76	1.86	
Actual Use/Month							4.83	13.85	16.11	13.69	11.44	5.64	

These figures include several cases where waters from various sources are co-mingled and may affect the actual use values presented here.

- 1/ The irrigated acreage figure was derived from SCS data for the Tonasket Creek subbasin which includes Ninemile Creek.
- 2/ The ratio of the estimated present consumptive use impact to the maximum consumptive use impact was derived for the months of April through September. The values used were as follows: April .30; May .86; June 1.0; July .85; August .71; September .35.
- 3/ The irrigated acreage data was derived from SCS data for the Toats-Coulee subbasin which includes Sinlahekin Creek.
- 4/ The irrigated acreage figure was derived from SCS data for the Spectacle Lake subbasin which includes Aeneas Creek.
- 5/ The irrigated acreage figure was derived from SCS data for the Siwash-Bonaparte Creek subbasin which includes Antoine Creek.
- 6/ The irrigated acreage figure was derived from SCS data for the Tunk Creek area which includes Chewiliken Creek.
- 7/ The irrigated acreage figure was derived from SCS data for the Loup Loup Creek area which includes Tallant Creek.

GLOSSARY

ACRE-FOOT: A unit for measuring the volume of water or sediment. It is equal to the amount of water needed to cover one acre of land with water one foot deep. This is 43,560 cubic feet, or 325,851 gallons.

ALLOCATION: The process of legally encumbering specific amounts of the water resource for application to beneficial uses through instruments called water rights.

BASE FLOW: As defined in the Water Resources Act of 1971, base flows are the flows administratively established "necessary to provide for the preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values."

CLOSURE: Administrative measure to keep water resources from further appropriation to consumptive uses. Generally, domestic household use and normal stock watering are exempted when there is no practicable source of supply.

CONFLUENCE: A place of meeting of two or more streams; the point where a tributary joins the main stream; a fork.

CONJUNCTIVE USE: The integrated use of ground and surface water in such a way as to increase the benefits of the use of all the waters of the basin.

CONSUMPTIVE USE: The amount of water used in such a way that it is no longer directly available. Includes water discharged into the air during industrial uses, or given off by plants as they grow (transpiration), or water which is retained in the plant tissues, or any use of water which prevents it from being directly available.

CONSUMPTIVE USE REQUIREMENT (crop): The amount of consumptive use for irrigation each year for a particular type of crop., Measured in acre-feet or feet per acre.

CONTROL STATION: Any measurement site at which a regulatory base flow has been established.

CUBIC FEET PER SECOND (cfs): A unit of measure for the rate of discharge of water. One cubic foot per second is the rate of flow of a stream with a cross section of one square foot which is flowing at one foot per second. It is equal to 448.8 gallons per minute.

DISCHARGE: In simplest form, discharge simply means outflow. The term can describe the flow of water from a faucet or from a drainage basin covering hundreds of square miles.

DIVERSION: Taking water from a stream or other body of water into a canal, pipe, or other conduit.

DOMESTIC USE: Water used by a single household generally including one-half an acre lawn or noncommercial garden irrigation.

DRAINAGE AREA: The area of land drained by a stream, measured in the horizontal plane. It is the area which is enclosed by a drainage divide.

DRAINAGE BASIN: A part of the surface of the earth that is occupied by a drainage system consisting of a surface stream or a permanent body of water together with all tributary streams and bodies of impounded water (lakes, ponds, reservoirs, etc.).

FLOOD: Any relatively high streamflow or an overflow that comes from a river or body of water and causes or threatens damage.

GAGING STATION: A particular location on a stream, canal, lake, or reservoir where systematic measurements of the quantity of water flowing are made.

GROUND WATER: Water in the ground that is in the zone of saturation. Natural recharge includes water added by rainfall, flowing through pores or small openings in the soil into the water table. Artificial recharge includes adding water to the aquifer through wells.

HYDRAULIC CONTINUITY: A cause and effect relationship between water under the ground with water standing or flowing on the surface.

HYDROGRAPH: A graph showing varying streamflow (or stream discharge) with respect to time during a year as determined at a specific cross-sectional location in the stream.

INSTREAM VALUE: The attitude of society respecting the use of water instream for aesthetic, fish and wildlife, recreation, hydroelectric, and general environmental purposes.

NONCOMMERCIAL AGRICULTURAL IRRIGATION: Beneficial use of water upon single family, tracts of not more than three acres for the purpose of crops and livestock for domestic uses.

NONCONSUMPTIVE USE: Use of water in a manner which does not consume the resource. Fishery, aesthetic, arid hydropower uses are examples of nonconsumptive use.

PERENNIAL STREAM: A stream, at any given location, is considered 'perennial' if its natural flow is normally continuous.

PRECIPITATION: The discharge of water, as rain, snow, hail, etc., out of the atmosphere, generally onto land or water surfaces. This is the process which permits atmospheric water to become surface or subsurface water. The term precipitation is often used to describe the amount of water that is precipitated.

PUBLIC WATER SUPPLY: The system for the collection, treatment, storage, and distribution of potable water from the sources of supply to any community, collection or number of individuals, but excluding water supplies serving one single family residence.

RESERVATION: An approved priority claim to water for a future beneficial use.

RETURN FLOW (irrigation): Irrigation water which is not consumed in evaporation or plant growth, and which returns to a surface stream or ground water aquifer.

RELINQUISHMENT: Reversion to the state of a right to divert or withdraw water.

RIPARIAN: Pertaining to the banks of streams, lakes, or tidewater.

RIVER BASIN: The total area drained by a river and its tributaries; watershed; drainage basin.

RUNOFF: That-part of precipitation that appears in surface streams. This is the streamflow before it is affected by artificial diversions, reservoirs, or other man-made changes in or on stream channels.

STORAGE: Water naturally or artificially impounded in surface or underground reservoirs.

STREAMFLOW: The discharge or water flow that occurs in a natural channel. The word discharge can be applied to a canal, but streamflow describes only the discharge in a surface stream course. Streamflow applies to discharge whether or not it is affected by diversion or reservoirs.

STREAM MANAGEMENT UNIT: Stream segments, reaches, or tributaries, each containing a control station, which are identified as units for defining base flow levels.

APPROPRIATION LIMIT: The level beyond which appropriation permits will not be granted.

WATER RIGHT: A legal right and property interest subject to certain limitations to obtain water from specific sources for application to beneficial use. No water right exists until a permit is issued stating the amount of water and beneficial uses involved. Upon proof of beneficial use, a certificate is issued to the applicant.

WATERSHED: The area drained by a given stream; drainage basin.

WITHDRAW: The administrative procedure of closing a water supply source from further appropriation for an indefinite period of time. RCW 90.54.050(.2).

POLICY STATEMENTS
OKANOGAN CITIZEN'S ADVISORY COMMITTEE

Okanogan Basin
(1973-1975)

Future planning for the Okanogan Basin should place primary emphasis on the protection, preservation, and improvement of the existing water resources for future generations.

The planning and studies for irrigation and flood control development projects should consider multi-purpose benefits including all consumptive and nonconsumptive uses as well as environmental enhancement.

CONSUMPTIVE USES:

1. We recommend that allocation of additional water rights for irrigational purposes be contingent upon provision of adequate water to meet current needs. It being recognized that present uses have priority and that encouragement of additional future uses be dependent upon additional water being made available from additional storage sources.
2. We recommend that the agricultural industry of the Okanogan Basin continue to be the first priority in future management of water resources, with the understanding that consideration must be given to existing human consumption for maintenance of a reasonably healthy life style.
3. We recommend that the expansion of irrigated agricultural lands be encouraged, based on the addition of available water from the construction of storage facilities.
4. We recommend that we actively encourage the construction of storage facilities in Canada on the Similkameen River and its tributaries to help protect against severe flood damage and to provide water for additional beneficial uses.
5. We recommend that a study be initiated by the Corp of Engineers as to selection of the best possible site for a storage facility for the Similkameen River.
6. We recommend support of the Oroville-Tonasket Irrigation District - and the Okanogan Irrigation District in their efforts to secure Federal assistance for the purpose of conserving water by rehabilitation of their existing antiquated systems. We further support • expansion of their systems based on the availability of additional water.
7. We recommend that any future resource planning should consider the requests of the Colville Indian Reservation.

8. We recommend that the Department of Ecology, upon request from a rural subdivision developer for a water right, initiate a thorough and comprehensive investigation as to the adverse affects issuance of that water right would have on other users. If it can be determined that such issuance would be detrimental, then such water rights should be denied. The purpose of this recommendation is to prevent "mining" of water aquifers as well as surface runoff.

NONCONSUMPTIVE USES

1. In recognition of the fact that the amount of arable land in the Okanogan Valley is limited, we recommend that planning efforts be directed toward protection of agricultural lands. Further, we recommend that future development of industrial and urban expansion protect and preserve the limited land available for agricultural purposes so that the scenic and recreational value of the Okanogan Valley will be maintained and preserved.
2. We recommend that hearings be conducted by the International Joint Commission concerning establishment of the high level of the lake to be maintained at 913 feet and the low level at 911 feet on Lake Osoyoos, and that these hearings also address themselves to the possibility of regulating that body of water so that it might serve as a reservoir and available for downstream uses.
3. It is recognized that sport and commercial fisheries represent an important economic value to the Okanogan Basin and to the peoples of the state. It is therefore, recommended that minimum flows be established that will preserve and maintain a fisheries value, but not at the expense of present agricultural uses of water resources.
4. We recommend that State and Federal government recognize the difficulty of meaningful water resource planning when claims by the Colville Indian Tribes have not been clarified. We recommend an early determination to clarify their claims so that realistic and meaningful planning can be accomplished.
5. We recommend that urban levees in the Okanogan basin be made adequate to provide protection against at least the 100-year flood. It being realistically understood that it will be several years before construction of any flood control structure will be completed. Urban levee improvement is necessary to prevent extensive damages in the intern period.
6. We recommend that the following future water uses priorities be established and recognized by all county, State, and Federal agencies involved in water resource planning. Priorities listed are in order of importance as reflected by residents of the Okanogan Basin:

- F. Domestic and municipal uses
 - G. Agriculture and related agricultural industrial uses
 - H. Fisheries
 - I. Recreation
 - J. General industrial development
 - K. Mining
7. We recommend that Enloe Dam on the Similkameen not be removed, but that a fish ladder be installed to allow passage of fish over the dam and falls.
 8. We recommend that the residents of Lake Osoyoos initiate and carry out an active program to effectively eliminate all sources of pollution to the lake that are a direct result of practices of residents on the United States side of the International Boundary.
 9. We recommend that all practicable efforts be initiated to encourage the Canadians to maximize their efforts to eliminate sources of pollution to the Okanogan River system.
 10. We recommend that the U.S. Army Corps of Engineers thoroughly investigate the feasibility of replacing Zosel dam with an adequate control structure that would regulate the levels of Lake Osoyoos. We further recommend that the Corps incorporate into this investigative effort a workable solution to improving the quantity discharge from Lake Osoyoos and the annual recurring problem of channel silting caused by Tonasket Creek. The committee realizes the interrelationship of all these problems and feels that a comprehensive and workable solution must be found.

TRANSMITTAL OF RULES ADOPTED

FROM: DEPARTMENT OF ECOLOGY
(Name of Agency)

TO: CODE REVISER
LEGISLATIVE BLDG. (Southwest Corner, Ground Floor)
OLYMPIA 98504

The enclosed rules: Permanent rules , being Order No. DE 76-25
Emergency rules

relating to (Name of rules or description of subject matter)

a regulation proposed for the management of the water resources of the Okanogan River Basin. It consists, among others, of elements pertaining to the establishment of base flows to protect instream values, restrictions or closure of certain tributary streams to further appropriation and allocation of water for future appropriation by use category; creating chapter 173-549 WAC.

(ALTERNATIVE A. Use only for adoption of permanent rules)

pursuant to Notice No. 5918 ^① filed with the code reviser on May 12, 1976 ^② were regularly adopted as permanent rules of this agency at St. Martin's College on 7/14/76 and are herewith filed in the office of the code reviser pursuant to chapter 34.04 RCW. The effective date of such rules shall be _____ ^③

(ALTERNATIVE B. Use only for adoption of emergency rules)

pursuant to its finding in the attached administrative order, that the immediate adoption of these rules is necessary for the preservation of the public health, safety, or general welfare and that observance of the requirements of notice and opportunity to present views on the proposed action would be contrary to the public interest, were regularly adopted as emergency rules of this agency at _____ on _____ and are herewith filed in the office of the code reviser pursuant to chapter 34.04 RCW.

The undersigned hereby certifies that the requirements of chapter 34.04 RCW and of the Open Public Meetings Act of 1971, chapter 42.30 RCW have been fulfilled.

Dated this 14th day of July 1976

STATE OF WASHINGTON
FILED
JUL 14 1976
CODE REVISOR'S OFFICE

DEPARTMENT OF ECOLOGY
(AGENCY)
By Wesley A. Hunter
Wesley A. Hunter
Deputy Director
Title

- ① Office number as appears on the copy of notice returned to you by reviser's office (if proceedings were continued, use no. of last notice)
- ② Stamped date as appears on the copy of notice returned to you by reviser's office (if proceedings were continued, use date of last notice)
- ③ Unless a later date is specified in this order or is prescribed in another statute, rules are effective 30 days after filing: RCW 34.04.040. Leave this space blank except in such special cases. [Order 9, filed 9/25/74, .eff. 10/25/74] [Form CR-2; Rev. 9/21/74]

Water Resources Program in
the Okanogan River Basin, WRIA-49

Chapter 173-549 WAC

NEW WAC 173-X49-010 GENERAL PROVISION. These rules, including any subsequent additions and amendments, apply to waters within and contributing to the Okanogan River Basin, WRIA 49 (see WAC 173-500-040). Chapter 173-500 WAC, the general rules of the Department of Ecology for the implementation of the comprehensive water resources program, applies to this chapter 173-549 WAC.

NEW WAC 173-549-020 ESTABLISHMENT OF BASE FLOWS. (1) Base flows are established for stream management units with monitoring to take place at certain control points as follows:

Stream Management Unit Information

Stream Management Unit Name, Control Station Name and Number	Control Station Location by River Mile, Section, Township, Range.	Affected Stream Reach
<u>Lower Okanogan</u>		
Okanogan R. at Malott (12447200)	17.0, 9-32-25E	Okanogan River confluence with Wells Pool to confluence of Chewiliken Cr.
<u>Middle Okanogan</u>		
Okanogan R. nr. Tonasket (12445000)	50.8, 8-36-27E	Okanogan River confluence of Chewiliken Creek to confluence Similkameen River
<u>Upper Okanogan</u>		
Okanogan R. Oroville (12439500)	77 3, 27-40-27E	Okanogan River confluence of Similkameen River to Osoyoos Lake
<u>Similkameen</u>		
Similkameen R. at Nighthawk (12442500)	15.8, 7-40-26E	Similkameen River mouth to Canadian Border

(2) Base flows established for the stream management units in WAC 173-549-020(1) are as follows:

Base Flows in the Okanogan River
(All Figures in Cubic Feet Per Second)

Month	Day	Lower Okanogan 12447200	Middle Okanogan 12445000	Upper Okanogan 12439500	Similkameen 12442500
Jan.	1	1,000	800	320	400
	15	1,000	800	320	400
Feb.	1	1,000	800	320	400
	15	1,000	800	320	400
Mar.	1	1,000	800	320	400
	15	1,000	800	320	400
Apr.	1	1,120	910	330	510
	15	1,250	1,070	340	640
May	1	1,400	1,200	350	800
	15	4,000	3,800	500	3,000
Jun.	1	4,000	3,800	500	3,000
	15	4,000	3,800	500	3,000
Jul.	1	2,400	2,150	420	1,650
	15	1,400	1,200	350	900
Aug.	1	1,050	840	320	590
	15	800	600	300	400
Sept.	1	800	600	300	400
	15	800	600	300	400
Oct.	1	940	730	330	450
	15	1,100	900	370	500
Nov.	1	1,100	900	370	500
	15	1,100	900	320	500
Dec.	1	1,100	900	320	500
	15	1,050	850	320	450

(3) Base flow hydrographs, as represented in Figure II in the document entitled "Water Resources Management Program, . Okanogan River Basin" dated 1976, shall be used for definition of base flows on those days not specifically identified in WAC 173-549-020(2) and WAC 173-549-030.

(4) All rights hereafter established shall be subject to the base flows established in WAC 173-549-020(1) through (3), except as provided under WAC 173-5.19-030 herein.

(5) Future appropriations of water which would conflict with base flows shall be authorized, by the director, only in those situations when it is clear that overriding considerations of the public interest will be served.

NEW WAC 173--549-030 FUTURE ALLOCATIONS--RESERVATION OF SURFACE WATER FOR BENEFICIAL USES. (1) The department determines that there are surface waters available for appropriation from the stream management units specified in the amount specified in cubic feet per second (cfs) during the time specified as follows:

(a) Maximum surface water available for future allocation from the indicated reach is as follows:

Month	Lower Okanogan	Middle Okanogan	Upper Okanogan	Similkameen
Oct.	280	530	150	230
Nov.	530	720	200	360
Dec.	430	650	190	290
Jan.	380	540	220	220
Feb.	700	870	424	240
Mar.	30	250	10*	220
Apr.	1,040	1,460	370	820
May	4,280	5,230	440	4,890
Jun.	6,100	6,860	310	6,120
Jul.	1,690	2,190	10*	1,930
Aug.	170	430	10*	460
Sept.	10*	160	10*	190

All figures in cubic feet per second.

*Domestic and stock water only.

(b) The control station for each reach is defined in WAC 173--549-020:

(c) The allocation limit is set forth to be an amount equal to the one in two year natural reach discharge on a monthly basis with such conditions of use in Canada considered as deemed appropriate by the director.

(2) The amounts of water referred to in WAC 173-549-030 (1) above are allocated for beneficial uses in the future as follows:

(a) Allocation of surface waters by use category (April through September):

Use Description	APR	MAY	JUN	JUL	AUG	SEP
<u>Lower Okanogan</u>						
Domestic and Stock use	10	10	10	10	10	10
Instream Use under Base Flow	1250	4000	4000	1400	800	800
Agriculture	130	130	130	130	91	0
Other Consumptive Uses	Remaining waters up to the appropriation limit set forth in WAC 173-549-030 (1) (c)					
<u>Middle Okanogan</u>						
Domestic and Stock Use	10	10	10	10	10	10

Instream use under Base Flow	1070	3800	3800	1200	600	600
Agriculture	130	130	130	130	131	1.30
Other Consumptive Uses	Remaining waters up to the appropriation limit set forth in WAC 173-549-030 (1) (c)					
<u>Upper Okanogan</u>						
Domestic and Stock Use	10	10	10	10	10	10
Instream Use under Base Flow	340	500	500	350	300	300
Agriculture	60	60	60	0	0	0
Other Consumptive Uses	Remaining waters up to the appropriation limit set forth in WAC 173-549-030 (1) (c)					
<u>Similkameen</u>						
Domestic and Stock Use	10	10	10	10	10	10
Instream Use under Base Flow	640	3000	3000	900	400	400
Agriculture	20	20	20	20	20	20
Other Consumptive Uses	Remaining waters up to the appropriation limit set forth in WAC 173-549-030 (1) (c)					

All figures in cubic feet per second

(b) Allocation of surface waters by use category (October through March).

Use Description	APR	MAY	JUN	JUL	AUG	SEP
<u>Lower Okanogan</u>						
Domestic and Stock Use	10	10	10	10	10	10
Instream Use under Base Flow	1100	1100	1050	1000	100	1000
Agriculture	30	30	30	30	30	30
Other Consumptive Uses	Remaining waters up to the appropriation limit set forth in WAC 173-549-030 (1) (c)					
<u>Middle Okanogan</u>						
Domestic and Stock Use	10	10	10	10	10	10

Instream Use under Base Flow	901	900	850	800	800	800
Agriculture	30	30	30	30	30	30
Other Consumptive Uses	Remaining waters up to the appropriation limit set forth in WAC 173-549-030 (1) (c)					
<u>Upper Okanogan</u>						
Domestic and Stock Use	10	10	10	10	10	10
Instream Use under Base Flow	370	320	320	320	320	320
Agriculture	20	20	20	20	20	20
Other Consumptive Uses	Remaining waters up to the appropriation limit set forth in WAC 173-549-030 (1) (c)					
<u>Similkameen</u>						
Domestic and Stock Use	10	10	10	10	00	10
Instream Use under Base Flow	500	500	450	400	400	900
Agriculture	20	20	20	20	20	20
Other Consumptive Uses	Remaining waters up to the appropriation limit set forth in WAC 173-549-030 (1) (c)					

All figures in cubic feet per second

(c) Allocations presented in this section do not limit the utilization of waters stored for later release, provided such storage does not infringe upon existing rights or base flow and is duly permitted under RCW 90.03.290 and 90.03.350.

NEW WAC 173-549-040 PRIORITY OF FUTURE WATER RIGHTS DURING TIMES OF WATER SHORTAGE. (1) As between rights established in the future pertaining to waters allocated in WAC 173-549-030 (2) (a) and (b) all rights subject to this program shall be regulated in descending order of use category priority regardless of the date of the priority of right.

(2) As between rights established in the future within a single use category allocation of WAC 173-541-030, the date of priority shall control with an earlier dated right being superior to those rights with latter dates.

NEW WAC 173-549-050 STREAMS AND LAKES CLOSED TO FURTHER CONSUMPTIVE APPROPRIATIONS. The department, having determined there are no waters available for further appropriation through the establishment of rights to use water consumptively, closes the following streams and lakes to further consumptive appropriation for the periods indicated, with exceptions as noted:

(a) STREAM CLOSURES

Stream Name*	Affected Reach	Period of Closure
Johnson Creek	Mouth to headwaters	Closed all year
Chiliwist Creek	" Closed May 1 to Oct. 1	
Salmon Creek	" Closed all year	
Loup Loup Creek	"	Closed all year
Scotch Creek	"	Closed May 1 to Oct. 1
Tallant Creek	"	Closed May 1 to Oct. 1***
Pine Creek	"	Closed May 1 to Oct. 1
Aeneas Creek	"	Closed all year
Whitestone Lake and Creek	"	Closed all year
Antoine Creek	"	Closed all year
Bonaparte Creek	"	Closed May 1 to Oct. 1
Toats Coulee Creek	"	Closed all year
Sinlahekin Creek	"	Closed all year**
Nine Mile Creek	"	Closed all year
Whiskey Cache Creek	"	Closed all year
Siwash Creek	"	Closed all year
Chewiliken Creek	"	Closed May 1 to Oct. 1**
Tunk Creek	"	Closed May 1 to Oct. 1
Tonasket Creek	"	Closed May 1 to Oct. 1**

*Including tributaries

**Exception to closure made for domestic and stock water.

***Except Tallant Creek south of the north line of sections 34 and 35, T. 33N, R. 25 E.W.M. The status of lower Tallant Creek is dependent upon further investigation and evaluation to assess its return flow characteristics.

(b) LAKE CLOSURES

All lakes not listed below are restricted to rights to divert water for domestic and stock watering purposes only as appropriate:

Name	Location		
	Sec.	Twp.	Range
Aeneas Lake	25	37N	26E
Blue Lake	21	37N	25E
Conconully (Salmon) Lake	4-5-6	34N	25E
Conconully Reservoir	18	35N	25E
Duck Lake	10	34N	26E
Fancher Lake	2	38N	28E
Forde	2	37N	25E
Leader Lake	16	33N	25E
Lemanski Lake	13	37N	25E
Osoyoos Lake	22	40N	27E
Palmer Lake	13	39N	25E
Sinlahekin Impoundments	3	37N	25E
Spectacle Lake	2	38N	26E
Whitestone Lake	17	38N	27E
Zosel's Mill Pond	27	40N	27E

NEW WAC 173-549-060 GROUND WATER. If it is determined that a future development of ground water affects surface waters subject to the provisions of chapter 173-549 WAC, then rights to said ground water shall be subject to the same conditions as affected waters.

NEW WAC 173-549-070 EFFECTS ON PRIOR RIGHTS. Nothing in this chapter shall be construed to lessen, enlarge or modify the existing rights acquired by appropriation or otherwise. Nothing in this chapter shall be construed to adversely affect Indian rights.