# WHITEWATER STREAM INVENTORY AND STREAMFLOW SUITABILITY FOR WHITEWATER CANOEING AND KAYAKING

by

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prepared under Contract No. 74-003

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

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# STATE WATER PROGRAM



## SPECIAL NOTICE

The attached report was prepared under contract for the Department of Ecology to provide data and information for the State's minimum flow program. This study was determined necessary for water resource management purposes relating to determining instream flow requirements for canoeing and kayaking under the provisions of State statutes RCW 90.22 and RCW 90.54. These statutes declare that recreational uses of water are beneficial and give the Department of Ecology the authority to consider instream recreational values in establishing minimum flow regulations.

Stream location maps, referred to on page 5, were not reproduced with this report but are available for inspection at the Department of Ecology headquarters in Olympia.

### WHITEWATER STREAM INVENTORY

AND

# STREAMFLOW SUITABILITY FOR WHITEWATER

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I agree that the Department of Ecology shall make copies available for inspection. I further agree that copying of this manuscript is allowable only for water managementrelated purposes. It is understood, however, that any copying of this manuscript for commercial purposes, or for financial gain, shall not be allowed without my written permission.

Date: January 22, 1974

#### INTRODUCTION

The purpose of this report is to: (1) conduct a partial inventory of streams and/or reaches of streams suitable for whitewater canoeing and kayaking in designated inventory areas, (2) establish a priority ranking for whitewater streams and/or reaches of streams and rating them according to desirability for canoeing and kayaking, and (3) provide, where sufficient data can be obtained, a minimum and most preferred low streamflow (in cubic feet per second) suitable for canoeing and kayaking. Whitewater streams were partially inventoried in the drainage basins indicated with red circles in Exhibit A.

#### PROCEDURES AND METHODS

#### Whitewater Stream Criteria

The partial inventory of whitewater streams or segments thereof are those streams considered "favorites" among canoers and kayakers. "White-water canoeing and kayaking" are those boating activities done on streams with appreciable turbulence or rapids. The boats used are decked (completely enclosed), lightweight, responsive, portagable and powered by paddle. "Favorite" whitewater streams in Washington generally meet most of the following criteria: suitable flows, aesthetic river environs, challenging but not too difficult rapids, and proximity to user. Often the "favorite" whitewater rivers are located in mountainous or semi-mountainous reaches of the stream which have a gradient in excess of 15 feet per mile and a preferred low streamflow in excess of 700 cfs (cubic feet per second). Most "favorite" whitewater rivers or reaches thereof would be in the Boulder Zone (IV) or Floodway Zone (III) (Interagency Committee for Outdoor Recreation,

#### Whitewater Stream Rating Value

The criteria used to evaluate whitewater streams is shown in Exhibit B. The criteria used are dependent to a degree on boater attitude objectives and boater experience. For example, boaters may be broadly grouped into two categories (1) those who prefer the riverscape environment for its own sake and the technical challenge of the river is secondary and (2) those intrigued primarily by the technical challenge of the whitewater and the riverscape environment is of secondary importance. The design criteria set forth in Exhibit B reflects both boater objectives; however, emphasis given to the former boater objective. The river criteria used to rate whitewater streams are riverscape interest, river channel interest, shore modification, river channel modifications, pollution evidence, people seclusion opportunity, streamflow, proximity to population center, and accessibility. A high assigned weighting factor was given to riverscape interest and river channel interest because the quality of these characteristics is the most important to the whitewater boater experience. Equal weight is given to shore and river channel modifications which are most often irreversible changes imposed on the natural riverscape and detract from quality boater experience. Pollution evidence is assigned a weight of moderate importance. Although forms of pollution may be highly intrusive to boater experience it is often a corrective situation. Moderate importance is also given to people seclusion opportunity and stream-Slight importance is given to proximity to population center and accessibility since these factors are largely a reflection of boater convenience rather than to the welfare and intrinsic value of the river.

The columns in the inventory table show nine criteria for evaluating streams related to whitewater boating. A rank value of relative importance is determined for each of the nine categories and then recorded in the heavy-

lined boxes. A value 3 indicates great importance, 2 moderate importance, and 1 slight importance. Mechanically the ranking is accomplished by drawing a diagonal line from left to right through the appropriate box. 25 datacriteria are separately ranked on a basis of 5 to 1. A value of 5 indicates high quality or a very small departure from the most desired characteristic. A value of 1 indicates low quality or a large departure from the most desired characteristic. The rank of the data-criteria is then recorded in the lower left hand corner. Each indicated data rank is multiplied by the assigned rank. This value is recorded in the upper right hand corner of each box.

Next, these values are summed vertically and the total is placed in the farright column. Thus, the total score provides an index of the relative quality of stream from a whitewater canoe and kayak standpoint.

#### Whitewater Streamflow Suitability

There is no single streamflow which is optimum for all whitewater boaters. Some whitewater enthusiasts, for example, are attracted to the tumbling, rushing waters of a high gradient stream during peak runoff periods. Other whitewater enthusiasts are attracted to calmer waters during the summer low flows. It is difficult, if not impossible, to establish a flow or a range of flows which will meet the approval of all concerned. It is logical, however, to establish an approximate minimum low flow which would interfere with the normal boating experience and rapids negotiation. For a small stream segment of similar character, a minimum low flow assessment would not be especially difficult to determine. However, under the practical circumstance of a typical 5 to 12 mile river trip, the character of the rapids, shallows and width of the river may vary considerably over the stream reach. Therefore, for a given streamflow within a stream reach with diverse

channel characteristics, the streamflow suitability for canoeing and kayaking may vary considerably for different parts of a stream reach. Secondly,
different points along the stream may change with time since rivers are
always either eroding or depositing materials. Normally the profile of a
river is relatively steep near the headwaters and relatively flat near the
lower reaches. However, this general relation is modified within any given
section by the geology of the river basin. Where topographic permits, local
steepening of gradient occurs where the river cuts across exposed bedrock or
beds of aggraded gravel and boulders. Where the gradient of a river increases,
the velocity of streamflow increases and the cross-sectional area (depth x
width) decreases. Thus, shallow or narrow channels of steep gradient are
critical to the canoeability. Portions of the stream where the channel is
deep and velocities slow, low flows are of little concern to the boater. Low
gradient streams usually have suitable flows for a longer period during the
year than high gradient streams.

The criteria for a <u>minimum low flow</u> is the minimum discharge necessary for a whitewater kayak or canoe to float freely over the rapids without dragging bottom. The following also applies to the minimum low flow definition: 1) the boater expertise in rapids negotiation is intermediate-to advanced. 2) the boat must float freely over the rapids and shallows for nearly 100 percent of the run. 3) usually a 10 to 25 percent reduction in minimum streamflow would result in difficult or impossible river navigation due to bottom dragging of boat in the shallows, rapids, or riffles. 4) the minimum low flow discharge needed for 2-man whitewater canoe instead of a one-man canoe or kayak probably would be increased, but only marginally. The minimum low flow needed for whitewater canoeing and kayaking is by definition only marginal. Therefore, the <u>preferred low flow</u> is the discharge

in excess of the minimum flow which is often ideally suited for rapids negotiation. The streamflow is often sufficient to cover most of the rocks which make the rapids negotiation easier, but the flow is not high enough to raise the river difficulty rating. The preferred low flow is often 25 to 200 percent higher than minimum low flow.

The reference point for the flow data is the U.S.G.S. gage that reflects as closely as possible the streamflow under consideration. It is essential to recognize that the flows given for minimum and preferred low streamflow in most cases are referenced to a U.S.G.S. streamflow gage which is located a considerable distance downstream or upstream of the stream reach of interest. Only in the latter case does the discharge given represent actual conditions of canoe or kayak suitability.

#### Stream Location

The location of each stream reach inventoried is shown on U.S.G.S. 1:125,000 maps by a yellow line. The starting and ending point for each stream reach is given by a blue and red circle, respectively. Where the ending location of the kayak and canoe trip corresponds to the beginning of the next trip a half circle in blue and red is shown. Each stream reach is given a code number.

#### DATA

The whitewater stream rating for each river or river segment and minimum low flow data are shown in Exhibit B. Where sufficient data are not available, no flow data are given. The river segments run by canoe and kayak groups are determined mainly by rapids difficulty rating, length

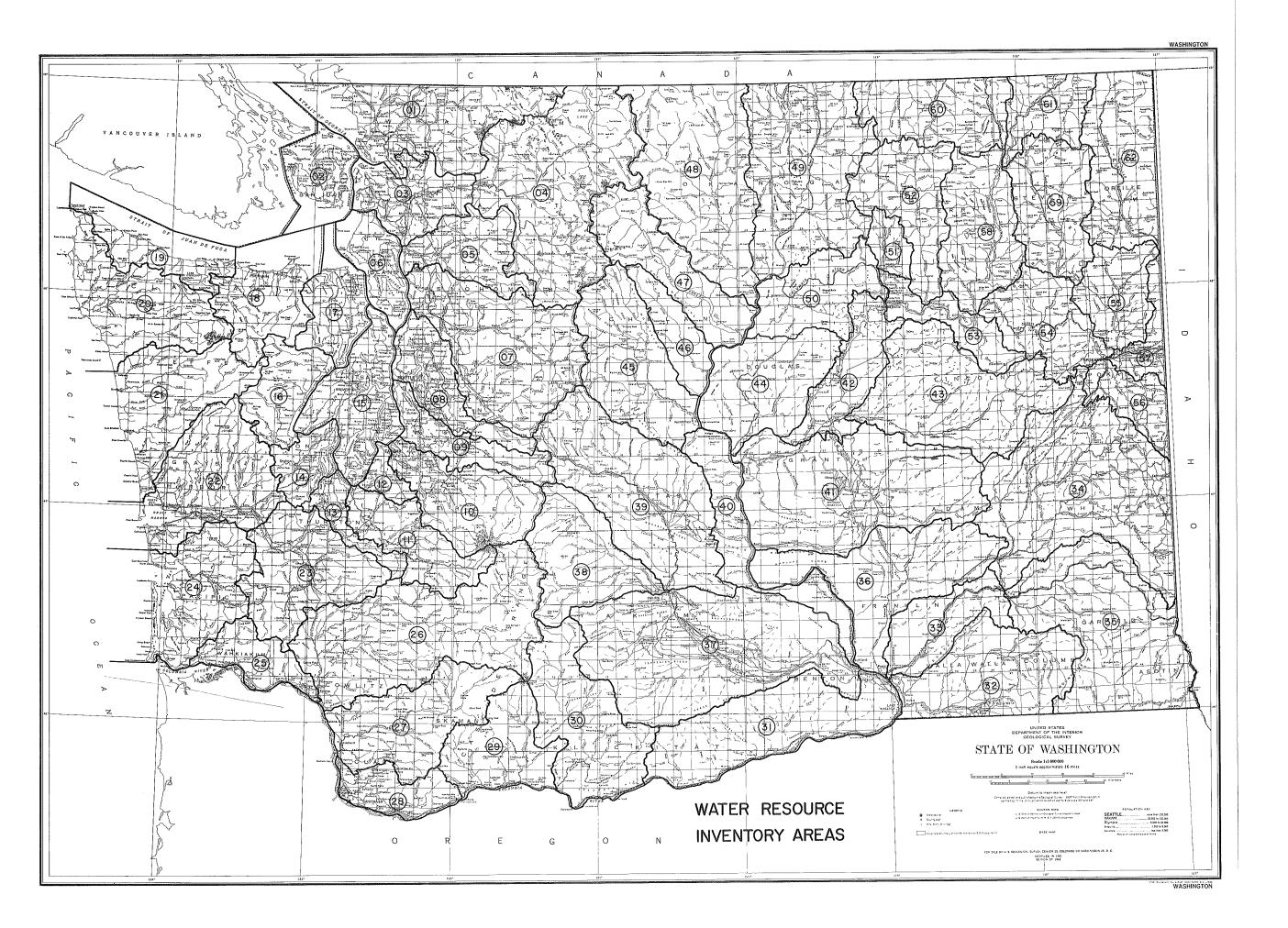
of run, and availability of put-in and take-out points. Understandably, the rating assigned to each criteria represent an average value for the stream segment rather than a reflection of the best or worse features for any part of the stream segment.

For each stream segment, the date, gaging station location, stream flow in cfs (cubic feet per second), and adequacy of the streamflow are given in Exhibit C. The data presented are the basis for the establishment of minimum and preferred low streamflow suitability for whitewater canoeing and kayaking.

A comparison of ranking values for all whitewater streams evaluated is shown in Exhibit D. The stream values include riverscape interest, river channel interest, freedom from shore and river channel modifications, and human use factors.

# EXHIBIT A

Water Resource Inventory Areas



# EXHIBIT B

Whitewater Stream Rating and
Minimum and Preferred Low Streamflow

#### MINIMUM AND LOW PREFERRED STREAMFLOW FOR WHITEWATER CANOEING AND KAYAKING

River No	River	Gaging Station U.S.G.S. No.	Minimum flow	Preferred low flow
088.0	Nisqually, Middle	12088400	900 - 1100	1100 - 1800
105.0	Green, Upper	12105900	550 - 650	650 - 1500
105.1	Green, Upper Gorge	do	700 - 800	700 - 1500
105.2	Green, Lower Gorge	do	450 - 550	550 - 1700
105.3	Green, Lower	do .	-400 - 500	500 - 1500
119.0	Cedar	12119000	350 - 450	450 - 1300
134.0	North Fork Skykomish	12134500	2800 3000	- <b>-</b> -
134.1	Skykomish, Sunset Falls	do	900 - 1200	1200 - 3000
134.2	Skykomish, Big Eddy	do	1400 - 1700	1600 - 3000
141.0	Middle Fork Snoqualmie, Upper	12141300	500 - 700	700 - 1200
141.1	do , Middle	do	700 - 800	800 - 1800
142.0	North Fork Snoqualmie	12142000	350 - 450	450 - 800
161.0	South Fork Stillaguamish	12161000	800 - 900	900 - 1600
186.0	Sauk, Upper	12186000	800 - 900	900 - 1500
189.0	Sauk, Middle	12189500 12188400	1200 - 1400	1400 - 2200
449.1	Methow, Middle	12449950	600 - 900	'
449.2	Methow, Lower	do	500 - 800	<del></del>
459.0	Wenatchee, Lower	12459000	1500 - 2000	

River: Canyon River (035.0)

River segment: Bridge 4 mi. above confluence of Canyon and W. Fork of Satsop to bridge on

Cougar Smith Rd.on W. Fork of Satsop (U.S.G.S. Wynoochee Valley and Grisdale)

Gaging station: Satsop River near Satsop (12035000)

Minimum flow:

Preferred low flow:

#### Remarks:

The Canyon River is a very narrow river bordered by rock walls and cliffs of tilted sedimentary beds. Moss-covered trees and waterfalls make a scenic shore environs. The water flow and gradient are low, so the river is easy to paddle; however, log debris is common along the stream.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	5 5	<ol> <li>Compatible developments blending with surroundings or screened from river view</li> </ol>	55
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	5/5	<ol> <li>Roadways not a visual or audible intrusion</li> </ol>	5/5
3. Diverse views and scenes	4/2	<ol> <li>Ko or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	515
4. Flora diversity and interest	515	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	3	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	345
6. Scenic backdrops and views of far places	39	POLLUTION-EVIDENCE	3
RIVER CHANNEL INTEREST	3	<ol> <li>Preedom from waste effluents, trash, dumping, odors</li> </ol>	30
7. Pools and rapids in relative short succession	26	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	26	19. Human-use activity near streamway light	340
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	50
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	5/5	STREAMFLOW	2
11. High stream bank usability for water contact activities	\$15	21. Streamflow adequate for boating year-round	24
12. Rapids difficulty rating II, III dur- ing low to moderate flows	39	22. Streemflow variation minimal	ZY
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	5/5	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	33
Relative ranking bhown in heavy boxes		ACCESSIBILITY	1/2
Value 3 - Great importance		24. Vehicular access adequate	2
Value 2 - Moderate importance		25. Vehicular access limited and screened from river	35
Value 1 - Slight importance		. RANKING SCORE	64

River: West Fork of Satsop River (035.1)

River segment: Bridge at Cougar-Smith road to footbridge at Franklin Park

(U.S.G.S. Wynoochee Valley and Grisdale).

Gaging station: Satsop River near Satsop (12035000)

Minimum flow:

Preferred low flow:

#### Remarks:

The West Fork of Satsop is a placid river with scenic wooded shore environs, mostly deciduous trees. The low gradient and large pools allow the river to be floated much of the year. The many gravel bars make ideal picnic and camping sites.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	)
1. Shore upland primarily undeveloped, forestry or limited agriculture	1/2	14. Compatible developments blending with surroundings or screened from river view	5/5
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	42	15. Roadways not a visual or audible intrusion	5/15
3. Diverse views and scenes	4/2	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	1/18
4. Flore diversity and interest	415	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, anow-capped mountains, pastoral views)	39	17. Freedom from riprep, diking, filling, bulkheads, levees, dams	3/15
6. Scenic backdrops and views of far places	39	POLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	<ol> <li>Preedom from waste effluents, trash, dumping, odors</li> </ol>	5/0
7. Pools and rapids in relative short succession	56	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	13	19. Human-use activity near streamay light	48
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shogls, confined channel)</li> </ol>	36	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	34
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	39	STREAMFLOW	2
11. High stream bank usability for water contact activities	5/5	21. Streamflow adequate for boating year-round	18
12. Rapids difficulty rating II, III dur- ing low to moderate flows	26	22. Streamflow variation minimal	3
13. Rapids generally within same difficulty rating at given flow	3/5	PROXIMITY TO POPULATION CENTER	1
According to modify the coverage between a 100 cm. La Tr. Egistación effica, una descripción provides tradición de Ario de 40 de Ariodes essential.  .		23. Within 100 miles or closer of major population center	3
Relative ranking bhown in heavy boxes		ACCESSIBILITY	-
Value 3 - Great importance	•	24. Vehicular access adequate	5
Value 2 - Moderate importance  Value 1 - Slight importance	•	25. Vehicular access limited and acreened from river	3
value t - Stiffic twholeages	,	RANKING SCORE 2	13

River: Wynoochee River (036.0)

River segment: 2.5 miles above Save Creek to 3.5 miles above Schafer

Creek (U.S.G.S. Wynoochee Valley and Grisdale)

Gaging station:

Wynoochee River near Aberdeen (12036000)

Minimum flow:

Preferred low flow:

#### Remarks:

The trip starts with a one or two miles of canyon then breaks into a braided channel with numerous islands and shallow gravel bars. The river has few rapids and is mostly swiftly moving current. Lots of log debris is common along the streamway.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
Shore upland primarily undeveloped,     forestry or limited agriculture	75 5	14. Compatible developments blending with surroundings or screened from river view	5/5
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	<ol> <li>Roadways not a visual or audible intrusion</li> </ol>	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
3. Diverse views and scenes	39	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	WS
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3
<ol><li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li></ol>	3	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	2/5
<ol><li>Scenic backdrops and views of far places</li></ol>	39	POLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	18. Freedom from waste effluents, trash, dumping, odors	50
7. Pools and rapids in relative short succession	1/3	PEOPLE SECULSION OPPORTUNITY	2
<ol> <li>Frequent rock and boulder beds with relatively deep channel passage</li> </ol>	13	19. Human-use activity near streammay light	W <sub>B</sub>
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	26	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	48
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	39	Streamflow	2
11. High stream bank usability for water contact activities	39	21. Streamflow adequate for boating year-round	36
12. Rapids difficulty rating II, III during low to moderate flows	26	22. Streamflow variation minimal	36
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	5/5	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	33
Relative ranking shown in heavy boxes		ACCESSIBILITY	1_1
Value 3 - Great importance	•	24. Vehicular access adequate	22
Value 2 - Hodorate importance	•	25. Vehicular access limited and screened from river	55
Value 1 - Slight importance		. RANKING SCURE 2	16

River: Deschutes River (079.0)

Vail Loop Road at bridge near Lake Lawrence to bridge at Hy 507 near Rainier (U.S.G.S. Vail and Lake Lawrence)

Gaging station: Deschutes River near Rainier (12079000)

Minimum flow:

Preferred low flow:

#### Remarks:

The Deschutes is a narrow-channelled river with a dense growth of alder and shrubs growing close to shore. The run has some long stretches of flat gradient with slow moving water; few large rocks and boulders are found in the streambed. Riverfront houses are prevalent along the shore.

	WHITEWATE	R STRE	AM INVENTORY CRITERIA	
	AND ADDRESS THE REAL PROPERTY OF A STREET		SMORE MODIFICATIONS	3
1.	RIVERSCAPE INTEREST  Shore upland primarily undeveloped, forestry or limited agriculture	3 9 3	14. Compatible developments blending with surroundings or screened from river	26
2.	Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)	13	15. Roadways not a visual or audible intrusion	1/2
3.	Diverse views and scenes	39	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	39
4.	Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3
5.	Outstanding features (i.e. water falls, snow-capped sountains, pastoral views)	39	17. Freedom from riprep, diking, filling, bulkheads, levees, dams	4/2
6.	Scenic backdrops and views of far places	26	Pollution -evidence	2
runiostradi	RIVER CHANNEL INTEREST	3	lo. Freedom from weste efficients, trash, dumping, odora	48
7.	Pools and rapids in relative short succession	13	PEOPLE SECURSION OPPORTUNITY	2
	Frequent rock and boulder beds with relatively deep channel passage	26	19. Human-use activity mear streamway light	36
	Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shogls, confined channel)	26	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	36
10.	Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	4/2	STREAMFLOW	2
11.	High stream bank usability for water contact activities	26	21. Streamflow adequate for boating year-round	34
12.	Rapids difficulty rating II, III dur- ing low to moderate flows	39	22. Streemflow variation minimal	36
13.	Rapids generally within same difficulty rating at given flow	5/5	PROXIMITY TO POPULATION CENTER	ı
			23. Within 100 miles or closer of major population center	X
	Relative ranking bhown in heavy boxes		accessibi lity	1
	Value 3 - Great importance		24. Vehicular access adequate	44
	Value 2 - Moderate importance  Value 1 - Slight importance	1	25. Vehicular access limited and acreened from river	4
•	same r - griftir raborrains		. RANKING SCORE 19	14

River: Nisqually River (088.0)

River segment: Bridge at McKenna to bridge one mile below Centralia Power

Plant (U.S.G.S. Weir Prairie and Yelm)

Gaging station: Nisqually River near McKenna (12088400)

Minimum flow: 900 - 1100 cfs Preferred low flow: 1100 - 1800 cfs

#### Remarks:

Nisqually River is a pleasant trip through "bouldery" drops of moderate difficulty intermittent with long pools of swift moving water. The Nisqually glacier feeds the river and the water is often turbid. The stream gaging station, Nisqually River near McKenna, records the water flow upstream from the diversion canal for Centralia Power Plant.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	45	14. Compatible developments blending with surroundings or screened from river view	4/2
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	ls. Roadways not a visual or audible intrusion	3/5
3. Diverse views and scenes	39	<ol> <li>Ro or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	39
4. Flore diversity and interest	39	RIVER CHANNEL MODIFICATIONS	)
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	39	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	1/3
6. Scenic backdrops and views of far places	39	POLLUTION-EVIDENCE	2
RIVER CHANNEL INTEREST	3	18. Freedom from waste effluents, trash, dumping, odors (5/6/14/5/14)	24
7. Pools and rapids in relative short succession	36	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streasway light	36
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops shoals, confined channel)</li> </ol>	39	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	36
O. Shore-waterway intimacy (i.e. atream width generally 300 ft wide or less during moderate to low flows)	39	stream low	2
ll. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	3
2. Rapids difficulty rating II, III dur- ing low to moderate flows	39	22. Streamflow variation minimal	34
3. Rapids generally within same diffi- culty rating at given flow	4/2	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	4
Relative ranking shown in heavy boxes		ACCESSIBILITY	1
Value 3 - Great importance		24. Vehicular access adequate	3
Value 2 - Moderate importance  Value 1 - Slight importance		25. Vehicular access limited and screened from river	5
Autne 1 - Strikur tubotraure	•	. RANKING SCORE Z	11

River: Puyallup River (093.0)

River segment: Electron Power Plant to Orting (U.S.G.S. Kaposin and Orting)

Gaging station: Puyallup River near Orting (12093500)

Minimum flow:

Preferred low flow:

#### Remarks:

The first 1.5 mile is a delightful section of steep narrow river with alternating pools and rapids and scenic bluffs. Below this short section, the river changes from a straight channel to a braided stream. Round boulders and gravels form shoals and islands. The river is heavily ripraped on both sides giving a river a "drainage ditch" appearance.

	WILTEWATE	R STRE	AH INVENTORY CRITERIA	Y
	RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
1.	Shore upland primarily undeveloped, forestry or limited agriculture	39	14. Compatible developments blending with surroundings or acreened from river view	X
2.	Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)	13	15. Roadways not a visual or sudible intrusion	4/2
3.	Diverse views and scenes	26	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	26
4.	Flora diversity and interest	26	RIVER CHANNEL HODIFICATIONS	3
5.	Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	26	17. Freedom from riprap, diking, filling, bulkheads, levees, dama	13
6.	Scenic backdrops and views of far places	39	POLLUTION -EVIDENCE	2
	RIVER CHANNEL INTEREST	3	is. Preedom from waste effluents, trash, dumping, odors	5/0
7.	Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2
8.	Frequent rock and boulder beds with relatively deep channel passage	26	19. Human-use activity near streamsay light	W.E
9.	Channel diversity (1.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)	26	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	36
10.	Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	26	STREAMFLOW	2
11.	High stream bank usability for water contact activities	13	21. Streamflow adequate for boating year-round	36
12.	Rapids difficulty rating II, III during fow to moderate flows	218	22. Streamflow variation minimal	24
13.	Rapids generally within same diffi- culty rating at given flow	4/5	PROXIMITY TO POPULATION CENTER	ı
			23. Within 100 miles or closer of major population center	44
	Relative ranking shown in heavy boxes		ACCESSIBILITY	1
	Value 3 - Great importance	The second second	24. Vehicular access adequate	22
	Value 2 - Moderate importance  Value 1 - Slight importance		25. Vehicular access limited and acreened from river	55
	value 1 ° Silgit importance		RANKING SCORE / "	14

River: Green River (105.0)

River segment: Tacoma Headworks to Palmer at Fish Hatchery

(U.S.G.S. Cumberland and Eagle Gorge)

Gaging station: Green River below Howard Hansen Dam (12105900)

Minimum flow: 550 - 650 cfs

Preferred low flow: 650 - 1500 cfs

#### Remarks:

A slightly more challenging run than below the Green River Gorge The upper section of the river provides a scenic view of the mountains. The lower section of the river is bordered by some housing, the town of Palmer, and the City of Tacoma water pipeline. Two outstanding features include accessibility and proximity to population center. The stream-gaging station below Howard Hansen dam is above the City of Tacoma diversion.

	R STRE	EAM INVENTORY CRITERIA	Y
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	39	14. Compatible developments blending with surroundings or acreened from river yiew	26
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roadways not a visual or audible intrusion	26
3. Diverse views and scenes	39	<ol> <li>Ro or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	2.6
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	39	17. Freedom from riprap, diking, filling, bulkheads, levees, dama	39
6. Scenic backdrops and views of far places	39	FOLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	l8. Freedom from weste effluents, trash, dumping, odors	510
7. Pools and rapids in relative short succession	4/2	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streamay light	36
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	36
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	39	STREAMFLOW	2
ll. High stream bank usability for water contact activities	26	21. Streamflow adequate for boating year-round	48
<ol> <li>Rapids difficulty rating li, III during low to moderate flows</li> </ol>	5/5	22. Streamflow variation minimal	36
<ol> <li>Rapids generally within same difficulty rating at given flow</li> </ol>	39	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	55
Relative ranking bhown in heavy boxes		ACCENSIBILITY	1
Value 3 - Great importance		24. Vehicular access adequate	4
Value 2 - Moderate importance	•	25. Vehicular access limited and screened from river	3
Value 1 - Slight importance	J	. RANKING SCURE	78

River: Green River (105.1)

River segment: Palmer to Franklin Bridge--first bridge below Palmer

(U.S.G.S. Cumberland)

Gaging station: Green River below Howard Hansen Dam (12105900)

Minimum flow: 700 - 800 cfs

Preferred low flow: 700 - 1500 cfs

#### Remarks:

The upper Green River Gorge has outstanding riverscape and river channel interest. Although a few scattered homes exist on the bluff rim, the shore upland is primarily undeveloped. The rapids and sharp drops in short succession (55 feet per mile) provide a challenging trip which is generally run by advanced boaters only. Since the channel slope is steep, this section of the river requires more water than other parts of the Green. Higher flows, such as 2000 cfs or more, require considerable whitewater expertise.

TAVATIRA	ER STRE	AM INVENTORY CRITERIA	
		compe wasteteration	3
RIVERSCAPE INTEREST	13	SHORE MODIFICATIONS  14. Compatible developments blending with	and the same of th
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	5/5	surroundings or screened from river	412
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	\$5	<ol> <li>Roadways not a visual or audible intrusion</li> </ol>	5/5
3. Diverse views and scenes	\$5	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	XS
4. Flora diversity and interest	5/5	RIVER CHANNEL HODIFICATIONS	)
5. Outstanding features (i.e. water falls snow-capped mountains, pastoral views)		17. Freedom from riprap, diking, filling, bulkheads, levees, dama	\$15
6. Scenic backdrops and views of far places	9/3	POLLUTION -EVIDENCE	3
RIVER CHANNEL INTEREST	3	l8. Freedom from waste effluents, trash, dumping, odora	¥8
7. Pools and rapids in relative short succession	\$ 5	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	5/5	19. Human-use activity mear streamlay light	36
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops shoals, confined channel)</li> </ol>	55	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	1/8
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	515	STREAMFLOV	2
ll. High stream bank usability for water contact activities	5/5	21. Streamflow adequate for boating year-round	36
12. Rapids difficulty rating II, III dur- ing low to moderate flows	39	22. Streamflow variation minimal	34
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	39	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	55
Relative ranking shown in heavy boxes		ACCENSIBI LITY	l
Value 3 - Great importance		24. Vehicular access sdequate	2
Value 2 - Moderate importance  Value 1 - Slight importance		25. Vehicular access limited and acreened from river	5
value i " Stignt importance	d	. RANKING SCORE 2	80

River: Green River (105.2)

River segment: Franklin Bridge to Flaming Geyser Park

(U.S.G.S. Black Diamond and Cumberland)

Gaging station: Green River below Howard Hansen Dam (12105900)

Minimum flow: 450 - 550 cfs Preferred low flow: 550 - 1500 cfs

#### Remarks:

The lower Green River Gorge is an ideal whitewater run. The riverscape interest is outstanding with primarily undeveloped shore upland, scenic sandstone bluffs, and flora diversity. Plants grow profusely near the steep cliffs and small waterfalls. The river channel diversity is equally outstanding with pools and rapids in short succession and frequent rock and boulder beds with relatively deep channel passages. The rapids difficulty is suitable for intermediate boaters.

WHITEWATE	R STRE	AM INVENTURY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	\$15	14. Compatible developments blending with surroundings or screened from river view	5/5
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	5/5	15. Roadways not a visual or audible intrusion	5/5
3. Diverse views and scenes	5/5	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	5/5
4. Flora diversity and interest	5/5	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	615	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	3/5
6. Scenic backdrops and views of far places	412	POLLUTION -EVIDENCE	3
RIVER CHANNEL INTEREST	3	18. Freedom from waste effluents, trash, dumping, odors	48
7. Pools and rapids in relative short succession	5/5	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	5/5	19. Human-use activity near streamay light	3
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	55	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	4/8
10. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	5/5	Streamflow	2
11. High stream bank usability for water contact activities	\$15	21. Streamflow adequate for boating year-round	48
12. Rapids difficulty rating II, III dur- ing low to moderate flows	4/2	22. Streamflow variation minimal	3
13. Rapids generally within same diffi- culty rating at given flow	4/2	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	5
Relative ranking shown in heavy boxes		ACCESSIBILITY	1
Value 3 - Great importance		24. Vehicular access adequate	2
Value 2 - Moderate importance		25. Vehicular access limited and screened from river	5
Value 1 - Slight importance		ranking score Z	94

River: Green River (105.3)

River segment: Flaming Geyser Park to second bridge downstream from Flaming

Geyser Park (U.S.G.S. Black Diamond)

Gaging station: Green River below Howard Hansen Dam (12105900)

Minimum flow: 400 - 500 cfs

Preferred low flow: 500 - 1500 cfs

#### Remarks:

This is a favorite easy whitewater stream that passes through pastoral land with scenic bluffs bordering much of the section. The run is only 2.5 miles long and known among paddlers as the "yoyo" stretch. The combination of proximity to population center, shortness of the run, and easy whitewater make it a much used stream for beginner trips.

. WHITEWATE	R STRE	AM INVENTORY CRITERIA	
	3	SMORE MODIFICATIONS	3
RIVERSCAPE INTEREST  1. Shore upland primarily undeveloped, forestry or limited agriculture	3	14. Compatible developments blending with surroundings or screened from river view	39
Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)	3	15. Roadways not a visual or audible intrusion	PE
3. Diverse views and scenes	39	<ol> <li>Ro or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	39
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	,
5. Outstanding features (i.e. water falls, snow-capped sountains, pastoral views)		17. Freedom from riprap, diking, filling. bulkheads, levees, dams	3 9
6. Scenic backdrops and views of far places	3	POLIUTION -EVIDENCE	2.
RIVER CHANNEL INTEREST	3	18. Freedom from waste efficients, tresh, dumping, odors	K
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder bads with relatively deep channel passage	26	19. Kuman-use activity mear streamsay light	24
9. Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel) 10. Shore-waterway intimacy (i.e. stream		20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	24
width generally 300 ft wide or less during moderate to low flows)	39	STREAMFIOU	2
ll. High stream bank usability for water contact activities	39	21. Streamflow adequate for boating year-round	48
12. Rapids difficulty rating Il, Ill dur- ing low to moderate flows	4/2	22. Streamflow variation minimal	36
13. Rapids generally within same diffi- culty rating at given flow	1/2	PROXIMITY TO POPULATION CENTER	i
		23. Within 100 miles or closer of major population center	25
Relative ranking bhown in heavy boxes		ACCESSIBILITY	
Value 3 - Great importance		24. Vehicular access edequate	35
Value 2 - Moderate importance		23. Vehicular access limited and acreened from river	33
Value 1 - Slight importance		ranking score 19	16

River: Cedar River (119.0)

River segment: Landsburg to Maple Valley (U.S.G.S. Maple Valley and Hobart)

Gaging station: Cedar River near Renton (12119000)

Minimum flow: 350 - 450 cfs

Preferred low flow: 450 - 1300 cfs

#### Remarks:

A favorite nearby stream that twists and winds a course through wooded deciduous forest, scenic bluffs, and river front homes and cottages. Most of the river front development is in lower one-half of the run. The river is narrow with overhanging trees along the stream bank. The stream channel is uniform gradient and during moderate and high flows provides a continuous, "splashy" run of easy-to-moderate difficulty. This river is often run in the winter because of the relatively easy rapids and more suitable flows.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	39	14. Compatible developments blending with surroundings or screened from river view	26
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roadways not a visual or audible intrusion	4/2
3. Diverse views and scenes	39	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	39
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	29	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	26
6. Scenic backdrops and views of far places	26	POLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	48
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streamway light	12
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	. 26	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	24
O. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	4/2	STREAMFLOW	2
ll. High stream bank usability for water contact activities	26	21. Streamflow adequate for boating year-round	24
12. Rapids difficulty rating II, III dur- ing low to moderate flows	5/5	22. Streamflow variation minimal	24
3. Rapids generally within same diffi- culty rating at given flow	\$15	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	3
Relative ranking shown in heavy boxes		ACCESSIBILITY	1
Value 3 - Great importance		24. Vehicular access adequate	y
Value 2 - Moderate importance  Value 1 - Slight importance		25. Vehicular access limited and screened from river	3
same t - Stikut imbotrance		. RANKING SCORE	90

River: North Fork of Skykomish River (134.0)

River segment: Bridge 0.1 mile above Howard Creek to confluence with South

Fork Skykomish (U.S.G.S. Index, Baring, and Monte Cristo)

Gaging station: Skykomish River near Gold Bar (12134500)

Minimum flow: 2800 - 3000 cfs

Preferred low flow:

#### Remarks:

The scenic backdrops of the high mountains in a primitive setting and the challenging whitewater are the special attrations of this run. This is a high gradient (66 ft per mile), boulder-studded river which needs a lot of water to navigate. The streamflow is not sufficient to run for much of the year. The road is close to river but is well-screened. The development and riprap of river banks near Index are the main distractions. This river is usually run by advanced boaters only.

WHITEWATE	R STREA	AM INVENTORY CRITERIA	Constantin
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
Shore upland primarily undeveloped,     forestry or limited agriculture	1/2	14. Compatible developments blending with surroundings or screened from river view	次
<ol> <li>Scenic shore environs (1.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	1/2	15. Rosdwaya not a visusi or sudible intrusion	1/2
3. Diverse views and scenes	VZ.	16. Ro or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	45
4. Flora diversity and interest	2/2.	RIVER CHANNEL MODIFICATIONS .	)
<ol> <li>Outstanding features (i.e. water falls, anow-capped mountains, pastoral views)</li> </ol>	55	17. Freedom from riprep, diking, filling, bulkheads, levees, dema	3
<ol> <li>Scenic backdrops and views of far places</li> </ol>	\\ 5\\	POLIUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odora</li> </ol>	1/8
7. Pools and rapids in relative short succession	5/5	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	1/2	19. Human-use activity near streamsay light	48
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	4/2	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	48
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	1/2	STREAME LOW	2
<ol> <li>High stream bank usability for water contact activities</li> </ol>	4/2	21. Streamflow adequate for boating year-round	24
12. Rapids difficulty rating II, III dur- ing low to moderate flows	26	22. Streamflow variation minimal	24
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	1/2	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	N.
Relative ranking bhown in heavy boxes		ACCESSIBILITY	
Value 3 - Great importance		24. Vehicular access adequate	N.
Value 2 - Moderate importance	•	25. Vehicular access limited and acreened from river	33
Value 1 - Slight importance	a)	. RANKING SCORE 2	.47

River: Skykomish River (134.1)

River segment: Sunset Falls to Anderson Creek (U.S.G.S. Index)

Gaging station: Skykomish River near Gold Bar (12134500)

Minimum flow: 900 - 1200 cfs

Preferred low flow: 1200 - 3000 cfs

#### Remarks:

One of the outstanding features of this river is the beautiful backdrop of Mt. Index viewed from almost any point on the river. Frequent "house-size" boulders in the streambed as well as pools and rapids in relatively short succession provide ideal eddies and "playspots" for whitewater boaters. The streamflow is probably more suitable year-round than any river in the near vicinity of Seattle. Sections of the Skykomish River rank high in difficulty rating, especially at higher flows. Some of the less attractive features include closeness of roadway, shore revetment for railroad, and one drop on the river which is difficult to negotiate.

WITTEWATE	R STRE	AM INVENTORY CRITERIA	ř
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, foreatry or limited agriculture</li> </ol>	4/2	14. Compatible developments blending with surroundings or screened from river visw	39
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	4/2	15. Roadways not a visual or audible intrusion	39
3. Diverse views and scenes	5/5	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	39
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3
<ol> <li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li> </ol>	5/5	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	39
<ol> <li>Scenic backdrops and views of far places</li> </ol>	3/5	POLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	18. Freedom from waste effluents, trash, dumping, odors	48
7. Pools and rapids in relative short succession	3/5	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	515	19. Human-use activity near streammay light	36
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	55	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	34
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	42	STREAMFLOW	2
11. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	3/0
12. Rapids difficulty rating 11, 111 dur- ing fow to moderate flows	39	22. Streamflow variation minimal	36
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	26	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	NY NY
Relative ranking bhown in heavy boxes		ACCESSIBILITY	
Value 3 - Great importance		24. Vehicular access adequate	44
Value 2 - Moderate importance  Value 1 - Slight importance		25. Vehicular access limited and screened from river	3
Aging t - Stiffur Imborrance	-	. RANKING SCURE 2	45

River: Skykomish River (134.2)

River segment: Railroad bridge .3 miles below No Name Creek to Gold Bar

bridge (U.S.G.S. Index)

Gaging station: Skykomish River near Gold Bar (12134500)

Minimum flow: 1400 - 1700 cfs Preferred low flow: 1600 - 3000 cfs

#### Remarks:

The scenic backdrop of Mt. Index and other surrounding steep mountains is an outstanding feature of this run. This is a moderate gradient run of intermediate difficulty and well-spaced pools and rapids. This stream reach is wider in many places than upstream of this run, and a greater streamflow is needed to cover the rock beds. The railroad is close to the river but is well-screened. Riverfront cabins and houses exist on left bank for most of lower half of run.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
Shore upland primarily undeveloped, forestry or limited agriculture	39	14. Compatible developments blending with aurroundings or acreened from river view	24
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roadways not a visual or audible intrusion	42
3. Diverse views and scenes	42	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clesrcut shore, bridges)</li> </ol>	39
4. Flora diversity and interest	39	RIVER CHANNEL HODIFICATIONS	3
5. Outstanding features (i.e. water falls, anow-capped mountains, pastoral views)	\\\\ 5	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	39
6. Scenic backdrops and views of far places	\$\ls	POLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste affluents, trash, dumping, odors</li> </ol>	1/8
7. Pools and rapide in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streamsay light	36
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	20. Setting, topography, shore, and channel characteristics conductive to seclusion apportunity	24
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	26	Streamflow	2
11. High stream bank usability for water contact activities	39	21. Streamflow adequate for boating year-round	36
12. Rapids difficulty rating II, III dur- ing fow to moderate flows	4/2	22. Streamflow variation minimal	3
13. Rapids generally within same diffi- culty rating at given flow	5/5	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	44
Relative ranking bhown in heavy boxes	Š	ACCESSIBI LITY	
Value 3 - Great importance		24. Vehicular access adequate	4
Value 2 - Moderate importance	•	25. Vehicular access limited and acreened from river	No.
Value 1 - Slight importance		. RANKING SCORE 2	.18

River: Middle Fork Snoqualmie River (141.0)

River segment: Taylor River and Middle Fork of Snoqualmie River confluence

to concrete bridge above gaging station (U.S.G.S. Bandera and Mt. Si)

Gaging station: Middle Fork Snoqualmie River near Tanner (12141300)

Minimum flow: 500 - 700 cfs

Preferred low flow: 700 - 1200 cfs

#### Remarks:

The combination of spectacular mountain scenery, easy whitewater, semiwilderness setting, and proximity to population center are outstanding features. Mt. Garfield and Russian Butte are almost in constant view from the river. The closeness of the road bed and clearcut forest on mountains are the main detractions from a near perfect setting.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	V5 5	14. Compatible developments blending with aurroundings or acreened from river view	5 15
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	412	15. Roadways not a visual or audible intrusion	39
3. Diverse views and scenes	\\\ 5\\\ 5\\\	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	39
4. Flora diversity and interest	412	RIVER CHANNEL HODIFICATIONS	3
<ol> <li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li> </ol>	5/5	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	39
6. Scenic backdrops and views of far places	515	Poliution -evidence	3
RIVER CHANNEL INTEREST	3	l8. Freedom from waste effluents, trash, dumping, odors	50
7. Pools and rapids in relative short succession	5/5	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streammay light	48
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	4/2	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	36
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	42	STREAMFLOW	2
11. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	24
12. Rapids difficulty rating II, III dur- ing low to moderate flows	5/5	22. Streamflow variation minimal	24
13. Rapids generally within same difficulty rating at given flow	5/5	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	55
Relative ranking shown in heavy boxes		ACCESSIBILITY	1
Value 3 - Great importance		24. Vehicular access adequate	55
Value 2 - Hodorate importance  Value 1 - Slight importance	. '	25. Vehicular access limited and screened from river	33
value 1 - oligne importante		. RANKING SCURE 2.	61

River: Middle Fork of Snoqualmie River (141.1)

River segment: Concrete bridge above gaging station to Tanner (U.S.G.S.

Bandera)

Gaging station: Middle Fork of Snoqualmie River near Tanner (121411300)

Minimum flow: 700 - 800 cfs

Preferred low flow: 800 - 1800 cfs

#### Remarks:

The river channel interest is exceptional with drops, narrow chutes, islands, large boulders in streambed and deep pools. The steep-sided shore and forested buffer zone provide an opportunity for solitude. The rapids on this section of the river are challenging, even at moderate flows.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS  14. Compatible developments blending with	) 9
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	4/2	surroundings or screened from river	412
Scenic shore environs (i.e. gorge,     cliffs, canyon, forest, primitive     setting)	5/5	13. Roedways not a visual or audible intrusion	42
3. Diverse views and scenes	4/2	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	4/2
4. Flora diversity and interest	4/2	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	7	17. Freedom from riprap, diking, filling, bulkheada, leveca, dama	4/2
6. Scenic backdrops and views of far places	39	Pollution -Evidence	3
RIVER CHANNEL INTEREST	3	<ol> <li>Preedom from waste effluents, trash, dumping, odors</li> </ol>	5/0
7. Pools and rapids in relative short succession	3/5	Reorle Seclusion opportunity	2
8. Frequent rock and boulder beds with relatively deep channel passage	\$15	19. Human-use activity near streamway light	48
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	515	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	48
10. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	5 15	STREAMFLOW	2
ll. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	24
12. Rapida difficulty rating 11, 111 dur- ing low to moderate flows	39	22. Streamflow variation minimal	24
13. Rapids generally within same difficulty rating at given flow	4/2	PROXIMITY TO POPULATION CENTER	l
		23. Within 100 miles or closer of major population center	55
Relative ranking whown in heavy boxes		ACCESSIBILITY	1
Value 3 - Great importance		24. Vehtcular access adequate	44
Value 2 - Hodorate importance	•	25. Vehicular access limited and acreened from river	W
Value 1 - Slight importance	4	. RANKING SCORE 2	60

River: Middle Fork Snoqualmie River (141.2)

River segment: Tanner to North Bend--second bridge below Tanner

(U.S.G.S. Bandera and North Bend)

Gaging station: Middle Fork Snoqualmie River near Tanner (121411300)

Minimum flow:

Preferred low flow:

#### Remarks:

The view of Mt. Si from parts of the river make this an interesting run even though much of the shore is semi-developed by housing. The river is quite wide in most places and the stream bank usability is limited by extensive riprap along the banks. This section of the Middle Fork provides an easy and short whitewater run close to a major population center.

WHITEWATE	R STRE	AH INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	26	14. Compatible developments blending with surroundings or screened from river view	26
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	26	15. Roadways not a visual or audible intrusion	26
3. Diverse views and scenes	26	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	24
4. Flora diversity and interest	26	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	412	17. Freedom from riprap, diking, filling, bulkheada, levees, dama	26
6. Scenic backdrops and views of far places	1/2	POLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	48
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	26	19. Human-use activity near streamesy light	24
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	26	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	24
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	26	STREAMFLOW	2
11. High stream bank usability for water contact activities	26	21. Streamflow adequate for boating year-round	24
12. Rapids difficulty rating II, III dur- ing low to moderate flows	412	22. Streamflow variation minimal	24
13. Rapids generally within same diffi- culty rating at given flow	\$15	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	35
Relative ranking shown in heavy boxes		ACCESSIBY LITY	
Value 3 - Great importance	•	24. Vehicular access adequate	3
Value 2 - Moderate importance		25. Vehicular access limited and screened from river	32
Value 1 - Slight importance		RANKING SCURE /	69

River: North Fork Snoqualmie River (142.0)

River segment: Campground above Deep Creek to swinging bridge below

Hancock Creek (U.S.G.S. Mt. Si)

Gaging station: North Fork of Snoqualmie River near Snoqualmie Falls (12142000)

Minimum flow: 350 - 450 cfs

Preferred low flow: 450 - 800 cfs

#### Remarks:

The North Fork of Snoqualmie ranks high in river channel interest because of the narrow stream bed, large boulders in stream with passable channels and high channel diversity. The river is confined by steep-sided banks, which have a profuse variety of flora. The clearcut forest down to the shore is visible on lower part of run. The run is in a semi-wilderness setting with no housing along banks no channel modifications, and the roadway is several hundred feet from the river.

	WILTEVATE	R STRE	AM INV	ENTORY CRITERIA	Variation of the same of the s
	RIVERSCAPE INTEREST	3		SHORE HODIFICATIONS	3
1.	Shore upland primarily undeveloped, forestry or limited agriculture	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	14.	Compatible developments blending with surroundings or screened from river view	5/5
	Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Roadways not a visual or audible intrusion	5/5
3.	Diverse views and scenes	\$ 5	16.	No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	4/2
4.	Flora diversity and interest	\$\\5\\]		RIVER CHANNEL MODIFICATIONS	3
5.	Outstanding features (i.e. water falls, snow-capped mountains, pastoral viewa)	42	17.	Freedom from riprep, diking, filling, bulkheade, levees, dass	55
	Scenic backdrops and views of far places	4/2		POLLUTION -EVIDENCE	2
R	IVER CHANNEL INTEREST	3	18.	Freedom from waste effluents, trash, dumping, odors	50
	Pools and rapids in relative short succession	43		PEOPLE SECLUSION OPPORTUNITY	3
	Frequent rock and boulder beds with relatively deep channel passage	3/5		Human-use activity near streamsay light	5/0
	Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)	42	20.	Setting, topography, shore, and channel characteristics conductive to seclusion opportunity	W8
	Shore-waterway intimacy (i.e. stream width generally 300 ft wide or leas during moderate to low flows)	5/5	•	STREAMFLOW	2
11.	High stream bank usability for water contact activities	4/2	21.	Streamflow adequate for boating year-round	24
12.	Rapids difficulty rating II, III dur- ing low to moderate flows	4/2	22.	Streamflow variation minimal	1/2
13.	Rapids generally within same diffi- culty rating at given flow	4/2		PROXIMITY TO POPULATION CENTER	ı
			23.	Within 100 miles or closer of major population center	55
	Relative ranking bhown in heavy bones			ACCESSIBILITY	1
	Value 3 - Great importance		24.	Vehicular access adequate	33
	Value 2 - Moderate importance	•	25.	Vehicular access limited and acreened from river	55
	Value 1 - Slight importance			. RANKING SCORE Z	78

River: South Fork of Snoqualmie River (144.0)

River segment: Bridge at Edgewick Road to bridge at Cedar Falls Road

(U.S.G.S. North Bend and Bandera)

Gaging station: South Fork of Snoqualmie River near North Bend (12144000)

Minimum flow:

Preferred low flow:

#### Remarks:

The South Fork of Snoqualmie River is a narrow, boulder-studded stream with scenic forested shores. The rapids are easy-to-moderate in difficulty. The less attractive features of parts of the river are the shore revetment, housing development, and low streamflow suitability much of the year.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
	3	SHORE MODIFICATIONS	3
RIVERSCAPE INTEREST  1. Shore upland primarily undeveloped, forestry or limited agriculture	26	14. Compatible developments blending with surroundings or screened from river view	26
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	<ol> <li>Roadways not a visual or audible intrusion</li> </ol>	26
3. Diverse views and scenes	39	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	39
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	39	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	26
6. Scenic backdrops and views of far places	39	POLIUTION-EVIDENCE	2
RIVER CHANNEL INTEREST	3	l8. Freedom from waste effluents, trash, dumping, odors	48
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streamesy light	24
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	24
10. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	5/5	STREAMFLOW	2
11. High stream bank usability for water contact activities	39	21. Streamflow adequate for boating year-round	24
12. Rapids difficulty rating II, III dur- ing low to moderate flows	\$15	22. Streamflow variation minimal	K
13. Rapids generally within same diffi- culty rating at given flow	4/2	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	35
Relative ranking shown in heavy boxes		ACCESSIBILITY	1
Value 3 - Great importance		24. Vehicular access adequate	44
Value 2 - Moderate importance		25. Vehicular access limited and screened from river	44
Value 1 - Slight importance		RANKING SCORE /	91

River: Tolt River (148.0)

Public Fish and Game access 3.0 miles below South and North River segment:

Fork Tolt to Carnation (U.S.G.S. Lake Joy and Garnation)

Gaging station:

Tolt River near Carnation (12148500)

Minimum flow:

Preferred low flow:

#### Remarks:

A small scenic stream with small drops and chutes, several split channels, and tight turns. Riprap of banks on lower one-third of run and riverfront development are the less attractive features of the river. The streamflow is often insufficient for boating much of the year. The whitewater difficulty is suitable for beginner-intermediate boaters.

WHITEWATER STREAM INVENTORY CRITERIA

WILLEWALD	SK SIRE	AM INVENTORY CRITERIA	e de servicio de la companio della c
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	39	14. Compatible developments blending with surroundings or screened from river view	26
<ol> <li>Scenic shors environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roedways not a visual or audible intrusion	39
3. Diverse views and scenes	39	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	39
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3
<ol> <li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li> </ol>	39	17. Freedom from riprep, diking, filling, bulkheads, levees, dams	2/
6. Scenic backdrops and views of far places	39	Polintion -evidence	2
RIVER CHANNEL INTEREST	3	18. Freedom from waste effluents, trash, dumping, odors	18
7. Pools and rapids in relative short succession	42	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	26	19. Human-use activity near streamay light	24
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	26	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	34
O. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	4/2	STREAMELOW	2
11. High stream bank usability for water contact activities	39	21. Streamflow adequate for boating year-round	2.4
12. Rapids difficulty rating II, III dur- , ing fow to moderate flows	5/5	22. Streamflow variation minimal	24
3. Rapids generally within same diffi- culty rating at given flow	\$15	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	55
Relative ranking bhown in heavy boses		ACCESSIBILITY	i
Value 3 - Great importance		24. Vehicular access adequats	33
Value 2 - Hodorate importance  Value 1 - Slight importance	•	25. Vehicular access limited and acreened from river	44
varez v - orrBur vahorranes	4	. RANKING SCORE \$6	17

River: South Fork Stillaguamish (161.0)

River segment: River Bar campground to Verlot campground near Ranger

Station (U.S.G.S. Granite Falls and Silverton)

Gaging station: Stillaguamish River near Granite Falls (12161000)

Minimum flow: 800 - 900 Preferred low flow: 900 - 1600

### Remarks:

The South Fork of Stillaguamish River is a narrow, "boulder-studded" river. Views of high alpine peaks and meadows can be seen from the river. Since the streambed is fairly steep and boulder-studded, a good water flow is required for preferred navigation conditions. Much of the river borders the highway.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	7
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	5/5	14. Compatible developments blending with surroundings or screened from river view	42
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	4/2	15. Roadways not a visual or audible intrusion	2
3. Diverse views and scenes	3/5	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	3
4. Flora diversity and interest	4/2	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	\$15	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	39
6. Scenic backdrops and views of far places	515	POLILITION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	18. Freedom from waste effluents, trash, dumping, odors	W
7. Pools and rapids in relative short succession	5/5	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	\$ 5	l9. Human-use activity near streamway light	3
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	5/5	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	24
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	4/2	STREAMFLOW	2
High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	2
2. Rapids difficulty rating II, III during low to moderate flows	39	22. Streamflow variation minimal	N
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	39	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	4
Relative ranking shown in heavy boxes		ACCESSIBILITY	
Value 3 - Great importance		24. Vehicular access adequate	5
Value 2 - Hodorate importance	•	25. Vehicular access limited and screened from river	2
Value 1 - Slight importance	•	RANKING SCORE Z	<u> </u>

River: Pilchuck Creek (168.0)

River segment: 5 miles upstream of Hy. 9 bridge and Pilchuck Creek inter-

section of Hy 9 bridge (U.S.G.S. Clear Lake)

Gaging station: Pilchuck Creek near Bryant (12168500)

Minimum flow:

Preferred low flow:

### Remarks:

Pilchuck Creek is a very narrow isolated stream with beautiful canyon walls and profuse flora growing among the rocks. Waterfalls are frequent. The drops are steep in short succession providing challenging boating. Unfortunately, the water flow is inadequate for boating most of the year.

	WHITEWATE	R STRE	INVENTORY CR	ITERIA	
R	IVERSCAPE INTEREST	3		olfications	3
1. Si	hore upland primarily undeveloped, orestry or limited agriculture	5/5	14. Compatibl surroundi view	e developments blending with ings or screened from river	5/5
c	cenic shore environs (i.e. gorge, liffs, canyon, forest, primitive etting)	\\\ \( 5 \)	13. Rosdways intrusion	not a visual or audible	5/15
	liverse views and scenes	\$15	intrusion	nited degree of environmental as (i.e. power lines, quarrys, on, clearcut shore, bridges)	4/2
4. F	lore diversity and interest	5/5		NNEL MODIFICATIONS	3
5. O	outstanding features (i.e. water falls, now-capped mountains, pastoral views)	5/5		from riprap, diking, filling, , levees, dams	5 15
	icenic backdrops and views of far places	39	POLLUTIO	I-EVIDENCE	2
RI	VER CHANNEL INTEREST	3	18. Frezdom í dumping,	from waste effluents, trash, odora	198
7. P	ools and rapids in relative short succession	5/5	people s	eclusion opportunity	2
ĸ	requent rock and boulder beds with relatively deep channel passage	515	light	e activity near otreassay	150
9	hannel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)	5/5	20. Setting, characte opportun	topography, shore, and channe ristics conducive to seclusion ity	30
10. S	shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	5/5	STREAMFU	OM	2
	ligh stream bank usability for water contact activities	55	21. Streamfl year-rou	or sdequate for boating	K
12. F	Rapids difficulty rating II, 111 dur- ing low to moderate flows	26	22. Streamfl	ov verietion minimal	13
	dapids generally within same difficulty rating at given flow	13	PROXIMIT	Y TO POPULATION CENTER	Į t
	3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		23. Within lepopulati	00 miles or closer of major on center	33
	Relative ranking bhown in heavy bones		ACCESSIB	1781.1	1
•	Value 3 - Great importance		QUINT THE PARTY OF	r access adequate	N
	Value 2 - Moderate importance		25. Vehicula from riv	r access limited and screened	55
	Value 1 - Slight importance			RANKING SCORE 2	266

River: Sauk River (186.0)

River segment: Bedal campground to confluence with Whitechuck River

(U.S.G.S. Whitechuck and Bedal)

Gaging station: Sauk River, above Whitechuck River, near Darrington (12186000)

Minimum flow: 800 - 900 cfs Preferred low flow: 900 - 1500 cfs

### Remarks:

The upper Sauk River is a fairly easy river with impressive background scenery of Sloan Peak, Mt. Pugh, and Whitechuck Mountains. The shore is well forested with only one small riverfront development. Log debris and sweepers in the streambed are common.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	7
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	5/5	14. Compatible developments blending with surroundings or screened from river view	5/5
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	4/2	15. Roadways not a visual or audible intrusion	5/5
3. Diverse views and scenes	5/5	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	5/5
4. Flora diversity and interest	412	RIVER CHANNEL MODIFICATIONS	3
<ol> <li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li> </ol>	4	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dems</li> </ol>	5/5
<ol> <li>Scenic backdrops and views of far places</li> </ol>	5/5	POLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	<ol> <li>Preedom from waste effluents, trash, dumping, odors</li> </ol>	3/0
7. Pools and rapids in relative short succession	4/2	PEOPLE SECUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	39	l9. Human-use activity near streas≥ay light	48
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	4/2	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	48
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	4/2	STREAMFLOW	2
ll. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	36
12. Rapids difficulty rating II, III dur- ing low to moderate flows	515	22. Streemflow variation minimal	24
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	5/5	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	33
Relative ranking shown in heavy boxes	·	ACCESSIBY LITY	ı
Value 3 - Great importance		24. Vehicular access adequate	33
Value 2 - Moderate importance	•	25. Vehicular access limited and screened from river	55
Value 1 - Slight importance	•	RANKING SCORE Z	75

River: Sauk River (189.0)

River segment: Confluence of Whitechuck River and Sauk River to

Darrington (U.S.G.S. Whitechuck and Silverton)

Gaging station: Sauk R near Sauk (12189500) and Suiattle R near Darrington (12188400)

Minimum flow: 1200 - 1400 cfs Preferred low flow: 1400 - 2200 cfs

### Remarks:

The middle Sauk River is a challenging whitewater run with forested shore-lands. Below Clear Creek near Darrington, homes and cottages are located near the stream banks. Because the glacier-fed Whitechuck River feeds the river, the Sauk is often a good summer trip.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	)
1. Shore upland primarily undeveloped, forestry or limited agriculture	1/2	14. Compatible developments blending with surroundings or screened from river view	1/2
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	4/2	15. Roadways not a visual or audible intrusion	4/2
3. Diverse views and scenes	3 5	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	4/2
4. Flora diversity and interest	42	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	5	17. Freedom from riprap, diking, filling, bulkheads, levees, dama	4/2
6. Scenic backdrops and views of far places	1/2	POLLUTION -EVIDENCE	3
RIVER CHANNEL INTEREST	3	18. Preedom from waste effluents, trash, dumping, odors	48
7. Pools and rapids in relative short succession	5/5 5	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	\$15	19. Human-use activity near streamay light	36
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	\$15	20. Setting, topography, shore, and channel characteristics conductive to seclusion opportunity	1/8
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	4/2	Streamplow	2
<ol> <li>High stream bank usability for water contact activities</li> </ol>	5/15	21. Streamflow adequate for boating year-round	5/0
<ol> <li>Rapids difficulty rating II, III dur- ing low to moderate flows</li> </ol>	39	22. Streamflow variation minimal	36
13. Rapids generally within same diffi- culty rating at given flow	4/2	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	33
Relative ranking shown in heavy boxes		ACCESSIBILITY	l
Value 3 - Great importance		24. Vehicular access adequate	4
Value 2 - Moderate importance  Value 1 - Slight importance		25. Vehicular access limited and screened from river	33
Tarde a - Vergue amportante		. RAHKING SCORE 2	67

River: Suiattle River (188.0)

River segment: Sulfur Creek campground to road crossing one-half mile upstream of

All Creek (U.S.G.S. Huckberry Mt., Downey Mt., Prairie Mt., Glacier Peak)

Lation: Suiattle River, above Big Creek, near Darrington (12188400)

Gaging station: Minimum flow:

Preferred low flow:

## Remarks:

The river is narrow and steep with lots of log debris, islands, and narrow chutes. Last half of run the river is wider and less difficult. Scenic mountains can be viewed in the background. In the summer the river is turbid with glacial silt.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3
Shore upland primarily undeveloped, forestry or limited agriculture	5/5	14. Compatible developments blending with surroundings or screened from river view	4/2
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	<ol> <li>Roadways not a visual or audible intrusion</li> </ol>	5/5
3. Diverse views and scenes	39	16. Ro or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	5/5
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	412	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	4/2
6. Scenic backdrops and views of far places	4/2	POLIUTION-EVIDENCE	2
RIVER CHANNEL INTEREST	3	18. Freedom from waste effluents, trash, dumping, odors (glacial Silt)	24
7. Pools and rapids in relative short succession	4/2	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streamay light	48
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	48
O. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	39	Streamflow	2
ll. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	48
12. Rapids difficulty rating II, III dur- ing low to moderate flows	39	22. Streemflow variation minimal	3(
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	412	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	3
Relative ranking bhown in heavy boxes		· ACCESSIBILITY	1
Value 3 - Great importance		24. Vehicular access adequate	3
Value 2 - Moderate importance		25. Vehicular access limited and screened from river	4
Value 1 - Slight importance		, RANKING SCORE 2	36

River: Methow River (449.0)

River segment: Wintrop to Twisp (U.S.G.S. Methow)

Gaging station: Methow River near Pateros (12449950)

Minimum flow:

Preferred low flow:

# Remarks:

The upper Methow river is a pleasant run through pastoral countryside with views of high semi-barren, rolling hills in the background. Gravel bars and beaches are numerous and black cottonwood trees are scattered along the streambanks. The road is close to the river in many places.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	)
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	26	14. Compatible developments blending with surroundings or screened from river view	39
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roadways not a visual or audible intrusion	5/6
3. Diverse views and scenes	39	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	38
4. Flora diversity and interest	26	RIVER CHANNEL MODIFICATIONS	3
<ol> <li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li> </ol>	39	<ol> <li>Freedom from riprap, diking, filling, bulkheade, levees, dams</li> </ol>	39
6. Scenic backdrops and views of far places	1/2	Pollution -Evidence	2
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	24
7. Pools and rapids in relative short succession	13	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	13	19. Human-use activity sear streesway light	36
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	26	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	24
<ol> <li>Shore-waterway intimacy (i.e. atream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	36	Streamplow	2
ll. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	4/8
12. Rapida difficulty rating II, III dur- ing low to moderate flows	26	22. Streamflow variation minimal	5/0
13. Rapids generally within same diffi- culty rating at given flow	5/5	PROXIMITY TO POPULATION CENTER	l
		23. Within 100 miles or closer of major population center	X
Relative ranking shown in heavy boxes		ACCESSIBILITY	1 2
Value 3 - Great importance		24. Vehicular access edequate	3
Value 2 - Moderate importance		25. Vehicular access limited and acreened from river	X
Agrae c - OssBuc amborcames		. RANKING SCORE /	74

River: Methow River (449.1)

River segment: Twisp to Gold Creek (U.S.G.S. Methow)

Gaging station: Methow River near Pateros (12449950)

Minimum flow: 600 - 900 cfs

Preferred low flow:

#### Remarks:

The middle Methow River is an easy whitewater stream with swift moving current. The countryside is open with scattered forest, orchard and pastoral land. Distant hills are viewed from the river and rock bluffs near the river are common. The roadway is often visible from the river. Unfortunately, discarded auto bodies are scattered along the shore in many places.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	26	14. Compatible developments blending with surroundings or screened from river view	39
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roadways not a visual or audible intrusion	2/6
3. Diverse views and scenes	39	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	39
4. Flora diversity and interest	26	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	39	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	39
6. Scenic backdrops and views of far places	4/2	POLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3_	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	24
7. Pools and rapids in relative short succession	26	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	13	19. Human-use activity near streamay light	3
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	26	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	2.4
10. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	39	STREAMFLOW	2
11. High stream bank usability for water contact activities	5/5	21. Streamflow adequate for boating year-round	up
12. Rapids difficulty rating II, III dur- ing low to moderate flows	39	22. Streamflow variation minimal	3
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	5/5	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	1
notation marking Shoring to beauty bowns		ACCESSIBILITY	1
Relative ranking bhown in heavy boxes  Value 3 - Great importance		24. Vehicular access adequate	3
Value 2 - Moderate importance		25. Vehicular access limited and screened from river	1
Value 1 - Slight importance		RANKING SCORE	86

River: Methow River (449.2)

River segment: Gold Creek to first bridge above Pateros

(U.S.G.S. Methow)

Gaging station: Methow River near Pateros (12449950)

Minimum flow: 500 - 800 cfs

Preferred low flow:

## Remarks:

The lower Methow River is an enjoyable trip of easy-to-moderate difficulty with scenic bluffs along the river. This section is more narrow requiring a little less water for minimum flow than upper portion; the lower Methow also has more rapids and "bouldery" drops. The frequent sand and gravel bars make ideal campsites. Trash dumping along shores is common.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	
			3
RIVERSCAPE INTEREST  1. Shore upland primarily undeveloped,	3	SHORE MODIFICATIONS  14. Compatible developments blending with surroundings or screened from river	10
forestry or limited agriculture  2. Scenic shore environs (i.e. gorge,	3	15. Roadways not a visual or audible	3
cliffs, canyon, forest, primitive setting)	3	intrusion  16. No or limited degree of environmental	5/
3. Diverse views and scenes	39	intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	39
4. Flora diversity and interest	26	RIVER CHANNEL MODIFICATIONS	3
<ol><li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li></ol>	39	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	39
<ol><li>Scenic backdrops and views of far places</li></ol>	4/2	POLLUTION -EVIDENCE	2
RXVER CHANNEL INTEREST	3	<ol> <li>Preedom from waste effluents, trash, dumping, odors</li> </ol>	24
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	26	19. Human-use activity near streamay light	36
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	36
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	39	Streamflow	3
ll. High stream bank usability for water contact activities	5/5	21. Streamflow adequate for boating year-round	48
12. Rapids difficulty rating II, III dur- ing low to moderate flows	4/2	22. Streamflow variation minimal	5/0
<ol> <li>Rapids generally within same difficulty rating at given flow</li> </ol>	39	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	N
Relative ranking shown in heavy boxes		ACCESSIBILITY	1
Value 3 - Great importance	•	24. Vehicular access edequate	35
Value 2 - Moderate importance	•	25. Vehicular access limited and acreened from river	N
Value 1 - Slight importance	٠	. RANKING SCURE /	97

River: Chiwawa River (457.0)

River segment: Goose Creek Campground to confluence with Wenatchee River

(U.S.G.S. Chiwaukum)

Gaging station: Wenatchee River at Plain (12457000)

Minimum flow:

Preferred low flow:

# Remarks:

The Chiwawa is a small winding stream with continuous gradient. Large rocks dot the streambed. The shore is heavily forested and is very scenic, especially the first two or three miles of run.

WHITEWATE	R STREA	AM INVENTORY CRITERIA	
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, foreatry or limited agriculture</li> </ol>	4/2	14. Compatible developments blending with surroundings or screened from river view.	4/2
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	4/2	15. Roadways not a visual or audible intrusion	5/5
3. Diverse views and scenes	39	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	4/2
4. Flore diversity and interest	4/2	RIVER CHANNEL MODIFICATIONS	3
<ol> <li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li> </ol>	39	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	555
6. Scenic backdrops and views of far places	39	POLIUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	50
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streammay light	48
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	48
<ol> <li>Shore-waterway intimacy (i.e. atream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	5/5	STREAMFLOW	2
ll. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	1/2
12. Rapids difficulty rating II, III dur- ing low to moderate flows	4/2	22. Streamflow variation minimal	3
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	4/2	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	2-2
Relative ranking shown in heavy boxes		ACCESSIBILITY	1
Value 3 - Great importance		24. Vehicular access adequate	3
Value 2 - Moderate importance		25. Vehicular access limited and screened from river	4
Value 1 - Slight importance		. RANKING SCORE 2	29

River: Wenatchee River (457.1)

River segment: Plain to Tumwater campground at Stevens Pass highway

(U.S.G.S. Leavenworth and Chiwaukum)

Gaging station: Wenatchee River near Plain (12457000)

Minimum flow:

Preferred low flow:

# Remarks:

The upper Wenatchee is an easy whitewater run with occasional small ledge drops. The river is wide, often 300 feet or more. Riverfront homes are scattered along the shore. This is a favorite fall river run because of autumn foliage of the aspen and black cottonwood trees.

WHITEWATE	R STRE	AH INVENTORY CRITERIA	generalists Water
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	4/2	14. Compatible developments blending with surroundings or screened from river view	39
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	4/2	<ol> <li>Roadways not a visual or audible intrusion</li> </ol>	el es
3. Diverse views and scenes	39	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	39
4. Flore diversity and interest	39	RIVER CHANNEL HODIVICATIONS	,
<ol> <li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li> </ol>	39	17. Freedom from riprap, diking, filling, bulkheads, levees, dama	4
<ol> <li>Scenic backdrops and views of far places</li> </ol>	39	FOLUTION -EVIDENCE	3
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste affiliants, trash, dumping, odors</li> </ol>	14
<ol> <li>Pools and rapids in relative short succession</li> </ol>	26	PEOPLE SECULISION OPPORTUNITY	3
8. Frequent rock and boulder beds with relatively deep channel passage	26	light	34
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	26	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	3
O. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	26	STREAMFLOW	2
il. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	4
12. Rapids difficulty rating II, III dur- ing low to moderate flows	39	22. Streamflow variation minimal	W
3. Rapids generally within same difficulty rating at given flow	5/5	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	5
Relative ranking shown in heavy boxes		ACCESSIBI LITY	l ı
Value 3 - Great importance		24. Vehicular access edequate	4
Value 2 - Moderate importance	•	23. Vehicular access limited and screened from river	W
Value 1 - Slight importance	•	RANKING SCORE	<u></u>

River: Wenatchee River (457.2)

River segment: Tumwater campground on Stevens Pass highway to Leavenworth

at Icicle Creek Road

Gaging station: Wenatchee River at Plain (12457000)

Minimum flow:

Preferred low flow:

# Remarks:

Tumwater Canyon is an extremely difficult section of whitewater which has plunging drops and chutes. Stevens Pass borders one side of river and the road riprap has changed natural character of shore; however, the south shore is very scenic with large rocks and forested cover. Much of the shore is within Wenatchee National Forest.

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WHITEWATE	R STRE	AM INVENTORY CRITERIA	g-amazanak
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3
Shore upland primarily undeveloped, forestry or limited agriculture	4/2	14. Compatible developments blending with surroundings or screened from river view	39
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roadways not a visual or audible intrusion	13
3. Diverse views and scenes	39	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	39
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3
<ol><li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li></ol>	4/2	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	26
<ol><li>Scenic backdrops and views of far places</li></ol>	5/5	POLLUTION -EVIDENCE	2
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	196
7. Pools and rapids in relative short succession	4/2	PEOPLE SECLUSION OPPORTUNITY	2
8. Frequent rock and boulder beds with relatively deep channel passage	5/5	19. Human-use activity near streamway light	24
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	24
10. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	4/2	STREAMFLOW	2
ll. High stream bank usability for water contact activities	26	21. Streamflow adequate for boating year-round	24
12. Rapids difficulty rating II, III dur- ing low to moderate flows	13	22. Streamflow variation minimal	48
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	13	PROXIMITY TO POPULATION CENTER	1
		23. Within 100 miles or closer of major population center	22
Relative ranking shown in heavy boxes		ACCESSIBY LITY	
Value 3 - Great importance		24. Vehicular access adequate	5
Value 2 - Moderate importance		25. Vehicular access limited and screened from river	N
Value 1 - Slight importance		. RANKING SCURE	80

River: Wenatchee River (459.0)

River segment: Leavenworth at Icicle Creek road to Peshastin

(U.S.G.S. Leavenworth)

Gaging station: Wenatchee River at Peshastin (12459000)

Minimum flow: 1500 - 2000 cfs

Preferred low flow:

#### Remarks:

This section of Wenatchee River has an open view with long pools of fast moving water between rapids. Chumstick Rapid, consisting of a series of overlapping ledges, is a very wide part of the river and requires more water to float than rest of the river. The shore is semi-developed occupied by homes, the town of Leavenworth, orchards, and commercial buildings.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	Name and the same
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	)
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	13	14. Compatible developments blending with surroundings or screened from river view	2
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	26	15. Roadways not a visual or audible intrusion	39
3. Diverse views and scenes	39	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	1
4. Flora diversity and interest	26	RIVER CHANNEL MODIFICATIONS	3
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	39	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	2
6. Scenic backdrops and views of far places	39	Polintion Evidence	2
RIVER CHANNEL INTEREST	3	l8. Freedom from waste effluents, trash, dumping, odors	36
7. Pools and rapids in relative short succession	26	PEOPLE SECLUSION OPPORTUNITY	3
8. Frequent rock and boulder beds with relatively deep channel passage	26	light	24
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	20. Setting, topography, shore, and channel characteristics conductive to seclusion opportunity	24
O. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	26	Streamflow	2
ll. High stream bank usability for water contact activities	26	21. Streamflow adequate for boating year-round	N
12. Rapids difficulty rating II, III dur- ing low to moderate flows	4/2	22. Streamflow variation minimal	4
3. Rapids generally within same difficulty rating at given flow	39	PROXIMITY TO POPULATION CENTER	ı
		23. Within 100 miles or closer of major population center	2
Relative ranking bhown in heavy boxes		ACCESSIBILITY	1
Value 3 - Great importance	•	24. Vehicular access adequate	4
Value 2 - Moderate importance	•	25. Vehicular access limited and acreemed from river	2
Value 1 - Slight importance		. RANKING SCORE / S	 58

River: Yakima River (479.0)

River segment: Teanaway River Junction to Thorp Road Bridge

(U.S.G.S. Thorp and Cle Elum)

Gaging station: Ya

Yakima River at Cle Elum (12479500)

Minimum flow:

Preferred low flow:

#### Remarks:

Yakima River is a favorite summer river because of suitable flows released for irrigation from Cle Elum, Kachess, and Kacheelus Reservoirs. In fall the yellow colors from aspen and black cottonwood trees along the stream banks provide a colorful trip. Mt. Stuart can be viewed from one point in the river. Basalt and sandstone outcrops provide interesting geology and scenic backdrops. The upland shore is mostly open grazing land. The river is very easy whitewater and makes an ideal trip for families and beginner paddlers. The main distractions are two rail tracks (one on each side of the river in places) and the highway which parallel the river in many places. Riprap is quite common along much of the river.

WHITEWATE	R STRE	AM INVENTORY CRITERIA			
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3		
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	39	14. Compatible developments blending with surroundings or screened from river view	39		
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roedways not a visual or audible intrusion	26		
3. Diverse views and scenes	39	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	2/4		
4. Flora diversity and interest	26	RIVER CHANNEL MODIFICATIONS	3		
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	26	17. Freedom from riprap, diking, filling, bulkheads, levees, dama	39		
6. Scenic backdrops and views of far places	4/2	POLLUTION -EVIDENCE	2		
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	3/		
7. Pools and rapids in relative short succession	13	PEOPLE SECLUSION OPPORTUNITY	2		
8. Frequent rock and boulder beds with relatively deep channel passage	13	19. Human-use activity near streamay light	34		
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops shoals, confined channel)</li> </ol>	.26	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	24		
O. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	26	STREAMFLOW	2		
ll. High stream bank usability for water contact activities	39	21. Streamflow adequate for boating year-round	3		
12. Rapids difficulty rating II, III dur- ing low to moderate flows	39	22. Streamflow variation minimal	3		
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	5/5	PROXIMITY TO POPULATION CENTER	1		
		23. Within 100 miles or closer of major population center	2		
Relative ranking bhown in heavy boxes		ACCESSIBILITY	1		
Value 3 - Great importance	24. Vehicular access adequate				
Value 2 - Moderate importance	25. Vehicular access limited and screened from river				
Value 1 - Slight importance		. RANKING SCURE /	77		

River: Cle Elum (480.0)

River segment: Salmon La Sac campground to bridge above Cle Elum Lake

(U.S.G.S. Kachess Lake)

Gaging station: Teanaway River, below Forks, near Cle Elum (12480000)

Minimum flow:

Preferred low flow:

### Remarks:

This part of the Cle Elum River is a straight, fast moving stream with few rock and boulder beds. Background mountain scenery can be viewed from the river. Campgrounds, hiking, trails, and scenic viewpoints are found along the shore. A whitewater slalom race at Salmon La Sac is a popular springtime event. No gaging station exists on the Cle Elum River below Cle Elum Lake, so Teanaway River was used as a rough indication of the water conditions of Cle Elum River.

WHITEWATE	AM INVENTORY CRITERIA				
	3	SHORE MODIFICATIONS	3		
RIVERSCAPE INTEREST  1. Shore upland primarily undeveloped, forestry or limited agriculture	412	14. Compatible developments blending with surroundings or screened from river view	4/2		
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	412	15. Roedways not a visual or audible intrusion	39		
3. Diverse views and scenes	30	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	WS.		
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3		
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	39	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	\\\\5\\		
6. Scenic backdrops and views of far places	5/5	POLLUTION EVIDENCE	3		
RIVER CHANNEL INTEREST	3	18. Preedom from waste effluents, trash, dumping, odors	5/0		
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2		
8. Frequent rock and boulder beds with relatively deep channel passage	26	19. Human-use activity near streamway light	36		
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	24		
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	32	STREAMFLOW	2		
<ol> <li>High stream bank usability for water contact activities</li> </ol>	39	21. Streamflow adequate for boating year-round	24		
12. Rapids difficulty rating II, III during fow to moderate flows	5/5	22. Streamflow variation minimal	36		
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	55	PROXIMITY TO POPULATION CENTER	ı		
		23. Within 100 miles or closer of major population center	22		
Relative ranking shown in heavy boxes		ACCESSIBILITY	1		
Value 3 - Great importance	24. Vehicular access adequate	35			
Value 2 - Moderate importance  Value 1 - Slight importance	25. Vehicular access limited and acreened from river				
value i - Stiglic importante	1	ranking score 2.	26		

River: Teanaway River (480.1)

River segment: 0.3 miles above Teanaway River on North Fork Teanaway River

to Masterson Road (U.S.G.S. Mt. Stuart and Cle Elum)

Gaging station: Teanaway River, below Forks, near Cle Elum (12480000)

Minimum flow:

Preferred low flow:

#### Remarks:

The Teanaway River is a narrow stream with a steep gradient. The drops are a series of ledges and the river channel is often braided.

WHITEWATE	R STRE	AM INVENTORY CRITERIA	1			
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3			
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	4/2	14. Compatible developments blending with surroundings or screened from river view	4/2			
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	4/2	15. Roadways not a visual or audible intrusion	4/2			
3. Diverse views and scenes	39	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	4/2			
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3			
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	39	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	4			
5. Scenic backdrops and views of far places	39	POLLUTION -EVIDENCE	2			
RIVER CHANNEL INTEREST	3	<ol> <li>Preedom from waste efficients, trash, dumping, odors</li> </ol>	48			
7. Pools and rapids in relative short succession	4/2	PEOPLE SECLUSION OPPORTUNITY	2			
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streamay light	34			
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops shoals, confined channel)</li> </ol>	39	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	3			
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	4/2	STREAMFLOW	2			
1. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	2			
<ol><li>Rapids difficulty rating II, III dur- ing low to moderate flows</li></ol>	4/2	22. Streamflow variation minimal	3			
3. Rapids generally within same diffi- culty rating at given flow	4/2	PROXIMITY TO POPULATION CENTER	ı			
		23. Within 100 miles or closer of major population center	2			
Relative ranking shown in heavy boxes		ACCESSIBILITY	1			
Value 3 - Great importance		24. Vehicular access adequate	]3			
Value 2 - Moderate importance		25. Vehicular access limited and acreened from river				
Value 1 - Slight importance		RANKING SCORE 2	25			

River: Tieton River (491.0)

River segment: Tieton Dam to Tieton Canal diversion headworks

(U.S.G.S. Tieton Basin and Weddel)

Gaging station: Tieton River at Tieton Dam, near Naches (12491500)

Minimum flow:

Preferred low flow:

# Remarks:

The Tieton River is a favorite summer river because of suitable flows released for irrigation from Rimrock reservoir. The most consistent flows occur from middle of July to September during the irrigation season; however, the river is subject to sudden fluctuations. The river is very steep and the high current velocities provide an exciting run. The streambed is narrow and has few side eddies. Heavily-traveled Hy. 12 frequently is in view from the river. Campgrounds are frequent on left bank. The right bank of river is primarily undeveloped forest land.

ANTITUAL TELLATE	R STRE	AM INVENTORY CRITERIA			
MILLANIC					
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3		
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	43	14. Compatible developments blending with surroundings or screened from river view	4/2		
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	13. Roedways not a visual or audible intrusion	2-6		
3. Diverse views and scenes	39	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	39		
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3		
<ol> <li>Outstanding features (i.e. water falls, enow-capped mountains, pastoral views)</li> </ol>	39	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	3		
6. Scenic backdrops and views of far places	4/2	Poliution -Evidence	3		
RIVER CHANNEL INTEREST	3	18. Preedom from waste effluents, tresh, dumping, odors	1/8		
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	3		
8. Frequent rock and boulder beds with relatively deep channel passage	26	19. Human-use activity near streamsay light	24		
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	24		
10. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	\$15	Streamflow	2		
11. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	36		
12. Rapids difficulty rating II, III dur- ing low to moderate flows	4/2	22. Streemflow variation minimal	36		
13. Rapids generally within same diffi- culty rating at given flow	5/5	PROXIMITY TO POPULATION CENTER	ı		
		23. Within 100 miles or closer of major population center	2 3		
Relative ranking bhown in heavy boxes		ACCESSIBILITY	l		
Value 3 - Great importance		24. Vehicular access adequate	55		
Value 2 - Moderate importance	25. Vehicular access limited and screened from river				
Value 1 - Slight importance		RANKING SCORE Z	.11		

River: Tieton River (492.0)

River segment: Tieton at headworks of Tieton Canal to 1st bridge below headworks

of Tieton Canal on Hy 12 (U.S.G.S. Tieton Basin and Weddel)

Gaging station:

Tieton R. at headworks of Tieton Canal, near Naches (12492500)

Minimum flow:

Preferred low flow:

### Remarks:

During the peak summer irrigation season typical diversions of 200-300 cfs from lower Tieton river would not affect the kayaking suitability since released flows are usually in excess of 1000 cfs. The lower run has more large rock and boulders in the streambed providing more eddies. The distant mountain views are more spectacular from the lower part of the river.

WHITEWATE	R STRE	AM INVENTORY CRITERIA			
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3		
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	39	14. Compatible developments blending with surroundings or screened from river view	39		
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roadways not a visual or audible intrusion	26		
3. Diverse views and scenes	39	<ol> <li>Ro or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	39		
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3		
<ol> <li>Outstanding features (i.e. water falls, anow-capped mountains, pastoral views)</li> </ol>	42	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levces, dams</li> </ol>	39		
<ol> <li>Scenic backdrops and views of far places</li> </ol>	4/2	POLLUTION -EVIDENCE	2		
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	48		
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2		
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streamway light	24		
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	4/2	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	24		
O. Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	5/5	Streamflow	. 2		
High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	3		
2. Rapida difficulty rating II, III during low to moderate flows	4/2	22. Streamflow variation minimal	3		
3. Rapids generally within same diffi- culty rating at given flow	5/5	PROXIMITY TO POPULATION CENTER	l		
		23. Within 100 miles or closer of major population center	2		
Relative ranking bhown in heavy boxes		ACCESSIBILITY			
Value 3 - Great importance		24. Vehicular access adequate	5		
Value 2 - Hodorate importance	25. Vehicular access limited and screened from river				
Value 1 - Slight importance		RANKING SCORE 2	.15		

River: Kalama River (223.0)

River segment: Pigeon Springs to Lower Kalama River Falls

(U.S.G.S. Pigeon Springs)

Gaging station: Kalama River near Kalama (14223500)

Minimum flow:

Preferred low flow:

# Remarks:

A narrow stream with rock bluffs and steeply sloping banks. In many places tall Douglas fir trees line the shores and serve as an excellent buffer from the nearby road. The flora under the forest cover near the river is quite profuse. The rapids vary considerably in difficulty in a short river distance. Hillside logging can be viewed from the river in places.

WHITEWATER STREAM INVENTORY CRITERIA						
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3			
Shore upland primarily undeveloped,     forestry or limited agriculture	4/2	14. Compatible developments blending with aurroundings or screened from river view	4/2			
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	5/5	<ol> <li>Roadways not a visual or audible intrusion</li> </ol>	39			
3. Diverse views and scenes	4/12	<ol> <li>Ro or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	39			
4. Flora diversity and interest	4/2	RIVER CHANNEL MODIFICATIONS	3			
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	42	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	39			
6. Scenic backdrops and views of far places	39	POLLUTION -EVIDENCE	3			
RIVER CHANNEL INTEREST	3	<ol> <li>Preedom from waste effluents, trash, dumping, odors</li> </ol>	W 8			
7. Pools and rapids in relative short succession	4/2	PEOPLE SECLUSION OPPORTUNITY	2			
8. Frequent rock and boulder beds with relatively deep channel passage	39	19. Human-use activity near streamsay light	36			
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	4/2	<ol> <li>Setting, topography, shore, and channel characteristics conductive to seclusion opportunity</li> </ol>	36			
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	5/5	Streamflow	2			
<ol> <li>High stream bank usability for water contact activities</li> </ol>	1/2	21. Streamflow adequate for boating year-round	36			
12. Rapids difficulty rating II, III dur- ing low to moderate flows	4/2	22. Streamflow variation minimal	24			
13. Rapids generally within same diffi- culty rating at given flow	26	PROXIMITY TO POPULATION CENTER	1			
		23. Within 100 miles or closer of major population center	33			
Relative ranking shown in heavy boxes		ACCESSIBILITY	1			
Value 3 - Great importance	24. Vehicular access ædequate	55				
Value 2 - Moderate importance	25. Vehicular access limited and acreened from river					
value i - Stignt importante	•	, RANKING SCORE 2.	30			

River:

Cowlitz River (226.0)

River segment:

La Wis Wis campground to Lake Creek on Cowlitz River

(U.S.G.S. Packwood)

Gaging station:

Cowlitz River at Packwood (14226500)

Minimum flow:

Preferred low flow:

### Remarks:

The Upper Cowlitz is a scenic stream in a steep-walled gorge. Rapids vary from riffles to easy small ledge drops. Below Muddy Fork the river is completely different with wide braided channel and vistas of distant mountains. Riverfront home development is prevalent for lower part of run.

WHITEWATE	AM INVENTORY CRITERIA				
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3		
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	39	14. Compatible developments blending with aurroundings or screened from river view	39		
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	26	15. Roadways not a visual or audible intrusion	39		
3. Diverse views and scenes	4/2	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	4/2		
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3		
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	39	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	4/2		
6. Scenic backdrops and views of far places	4/2	POLLUTION -EVIDENCE	2		
RIVER CHANNEL INTEREST	3	<ol> <li>Preedom from waste effluents, trash, dumping, odors</li> </ol>	48		
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2		
8. Frequent rock and boulder beds with relatively deep channel passage	26	light	36		
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	20. Setting, topography, shore, and channel characteristics conducive to seclusion opportunity	34		
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	39	STREAMFLOW	2		
ll. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	3		
12. Rapids difficulty rating II, III dur- ing fow to moderate flows	4/2	22. Streamflow variation minimal	34		
<ol> <li>Rapids generally within same diffi- culty rating at given flow</li> </ol>	39	PROXIMITY TO POPULATION CENTER	ı		
		23. Within 100 miles or closer of major population center	33		
Relative ranking shown in heavy boxes		ACCESSIBILITY			
Value 3 - Great importance		24. Vehicular access adequate	4		
Value 2 - Moderate importance  Value 1 - Slight importance	25. Vehicular access limited and acreened from river				
tarde to congress importante	,	. RANKING SCORE Z	05		

River:

Toutle, North Fork (242.0)

River segment:

Al Raught campground to Kid Valley Campground

Gaging station:

Toutle River Silver Lake (14242500)

Minimum flow:

Preferred low flow:

## Remarks:

Moderately steep gradient (34 ft/mi) river with nearly continuous easy rapids for first half of run, but the last half alternates between pools and riffles. The river is narrow and has a substantial amount of log debris. The shore varies between recent logged land and tall timber stands. The roadway is quite visible from river in many places and thinly scattered housing borders the banks.

WHITEWATE	AM INVENTORY CRITERIA				
RIVERSCAPE INTEREST	3	SHORE HODIFICATIONS	3		
Shore upland primarily undeveloped, forestry or limited agriculture	42	14. Compatible developments blending with aurroundings or screened from river view	4/2		
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	39	15. Roadways not a visual or audible intrusion	2		
3. Diverse views and scenes	4/2	16. No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)	39		
4. Flora diversity and interest	39	RIVER CHANNEL MODIFICATIONS	3		
5. Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)	39	<ol> <li>Freedom from riprap, diking, filling, bulkheads, levees, dams</li> </ol>	39		
6. Scenic backdrops and views of far places	39	Pollution -Evidence	3		
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	48		
7. Pools and rapids in relative short succession	4/2	PEOPLE SECLUSION OPPORTUNITY	3		
8. Frequent rock and boulder beds with relatively deep channel passage	26	19. Human-use activity near streamey light	36		
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	39	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	36		
<ol> <li>Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)</li> </ol>	4/2	STREAMFLOW	2		
11. High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	24		
12. Rapids difficulty rating II, III dur- ing low to moderate flows	4/2	22. Streamflow variation minimal	1/2		
13. Rapids generally within same diffi- culty rating at given flow	315	PROXIMITY TO POPULATION CENTER	ı		
		23. Within 100 miles or closer of major population center	33		
Relative ranking shown in heavy boxes		ACCESSIBILITY	1		
Value 3 - Great importance		24. Vehicular access adequate	5		
Value 2 - Hodorate importance	25. Vehicular access limited and screened from river				
Value 1 - Slight importance		. RANKING SCORE 2	.11		

River: Toutle River (242.1)

River segment: Bridge below North and South Fork Toutle to Tower Road

Bridge

Gaging station: Toutle River near Silver Lake (14242500)

Minimum flow:

Preferred low flow:

#### Remarks:

This is a beautiful section of the Toutle River with wooded shores and scenic rock cliffs. The Hollywood Gorge part of the river is very scenic with a narrow twisting canyon. The rapids are difficult and for experts only. However, the run is broken in the middle by 3-4 miles of easy flat water. The beginning part of run has large drops with big "house-size" boulders in the stream channel. Homes are scattered along the shore in places.

WHITEWATE	STRE	AM INVENTORY CRITERIA			
RIVERSCAPE INTEREST	3	SHORE MODIFICATIONS	3		
<ol> <li>Shore upland primarily undeveloped, forestry or limited agriculture</li> </ol>	3/5	14. Compatible developments blending with surroundings or screened from river yiew	4/2		
<ol> <li>Scenic shore environs (i.e. gorge, cliffs, canyon, forest, primitive setting)</li> </ol>	5/5	<ol> <li>Roadways not a visual or audible intrusion</li> </ol>	4/2		
3. Diverse views and scenes	5/5	<ol> <li>No or limited degree of environmental intrusions (i.e. power lines, quarrys, excavation, clearcut shore, bridges)</li> </ol>	yr		
4. Flora diversity and interest	12	RIVER CHANNEL MODIFICATIONS	3		
<ol> <li>Outstanding features (i.e. water falls, snow-capped mountains, pastoral views)</li> </ol>	y12	17. Freedom from riprap, diking, filling, bulkheads, levees, dams	545		
6. Scenic backdrops and views of far places	39	POLLUTION -EVIDENCE	2		
RIVER CHANNEL INTEREST	3	<ol> <li>Freedom from waste effluents, trash, dumping, odors</li> </ol>	48		
7. Pools and rapids in relative short succession	39	PEOPLE SECLUSION OPPORTUNITY	2		
8. Frequent rock and boulder beds with relatively deep channel passage	4/2	19. Human-use activity near streammay light	Y		
<ol> <li>Channel diversity (i.e. river bends, accretion bars, islands, boulder drops, shoals, confined channel)</li> </ol>	3/5	<ol> <li>Setting, topography, shore, and channel characteristics conducive to seclusion opportunity</li> </ol>	48		
Shore-waterway intimacy (i.e. stream width generally 300 ft wide or less during moderate to low flows)	4/2	STREAMFLOW	2		
High stream bank usability for water contact activities	4/2	21. Streamflow adequate for boating year-round	34		
2. Rapids difficulty rating II, III during low to moderate flows	26	22. Streamflow variation minimal	2		
3. Rapids generally within same diffi- culty rating at given flow	39	PROXIMITY TO POPULATION CENTER	1		
,	- د د د د د د د د د د د د د د د د د د د	23. Within 100 miles or closer of major population center	33		
Relative ranking shown in heavy boxes		ACCESS IB I LITY			
Value 3 - Great importance	24. Vehicular access adequate	3			
Value 2 - Moderate importance	25. Vehicular access limited and screened from river				
Value 1 - Slight importance		RANKING SCORE Z	49		

EXHIBIT C

Streamflow Data

# CHEHALIS RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Canyon R. (035.0)	Bridge 4 miles above confluence of Canyon R. and West Fork Satsop to bridge on Cougar Smith Road on West Fork of Satsop R.	Apr. 29, 1972	Satsop R. near Satsop (12035000)	2080	adequate	Low water. Enough water to run all rapids. Low gradient river.
West Fork of Satsop R. (035.1)	Bridge at Cougar Smith Road to footbridge at Franklin Park	Apr. 4, 1973	do	3040	adequate	Plenty of water.
do	do	Apr. 21, 1973	do	1190	adequate	* Water flow low, but okay.
do .	do	Nov. 18, 1973	do	3810	adequate	*Water flow adequate but low.
Wynoochee R. (036.0)	2.5 miles above Save Creek to 3.5 miles above Schafer Creek	Apr. 29, 1972	Wynoochee R. above Save Creek, near Aberdeen (12036000)	844	adequate	Water flow low. Enough for good run.
			DESCHUTES RIVER	BASIN		
Deschutes R. (079.0)	Vail Loop Road at bridge near Lake Lawrence to bridge at Hy. 507 near Rainier	Apr. 14, 1973	Deschutes R. near Rainier (12079000)	67	below minimum	Water too low. Dragged bottom on shoals.
do	·do	Apr. 7, 1973	do	80	do	* do
			NISQUALLY RIVER	BASIN		
Nisqually R. (088.0)	Bridge at McKenna to bridge 1 mile below Centralia Power Plant	Nov. 15, 1970	*Nisqually R.near McKenna (12088400)	1150	adequate	Low water. Close to minimum flow. Technical run in places but enough water.
do	do	May 22, 1971	do	2470	adequate	Plenty of water.
do	do	Feb. 13, 1972	do	3650	adequate	Ideal heavy water run. Wave formation good. Rocks not covered completely so good eddies.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club. # Stream gage above Centralia Power Plant diversion.

# NISQUALLY RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Nisqually R. (088.0)	Bridge at McKenna to bridge 1 mile below Centralia Power Plant	July 30, 1972	*Nisqually R. near McKenna (12088400)	926	Minimum	*Low water. Run marginal.
do	do	May 12, 1973	do	732	below minimum	*Low water. Real scraper hard to get down river.
do	do	Nov. 11, 1973	do	1584	adequate	*Low water. Flow good. All drops negotiable but less than powerful.
			PUYALLUP RIVER B	ASIN		
Puyallup R. (093.0)	Electron Power Plant to Orting	Mar. 24, 1973	Puyallup R. near Orting (12093500)	292	near minimum	Water flow low. Scraped a few spots with wide shoals. Didn't have to line boats or portage.
do	đo	May 17, 1973	do	874	adequate	*Good run. Delightful water level. Not many eddies.
do	do	July 18, 1973	do <sup>.</sup>	708	adequate	*Good run.
do	do	Nov. 17, 1973	do	530	adequate	*Plenty of water.
			GREEN RIVER BASI	<u>N</u>		
Green R: (105.0)	Tacoma Headworks to Palmer	Mar. 14, 1971	Green R. below Howard Hansen Dam (12105900)	925	adequate	Water low, but good run.
do	do	May 26, 1971	do	2480	adequate	Plenty of water, some rapids washed out at this flow.
do	do	Nov. 28, 1971	do	1250	adequate	Good "bouncy" run with most rocks covered.
đo	do	Mar. 19, 1972	do	4370	adequate	Current swift and forceful.
do	do	Feb. 3, 1973	do	598	near minimum	*Water flow low.
do	do	Apr. 8, 1973	do	542	minimum or below min- imum	Water flow low. Scraped bottom occasionally in shallow, wide parts of river.

 $<sup>\</sup>star$  Personal communication with individual members of Washington Kayak Club.

<sup>#</sup> Stream gage above Centralia Power Plant diversion.

# GREEN RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Green R. (105.0)	Tacoma Headworks to Palmer	May 2, 1973	Green R. below Howard Hansen Dam (12105900)	692	adequate	Good water flow.
do	do	Nov. 24, 1973	do	479	minimum	*Water low. Just enough to run without dragging bottom.
đo	do	Dec. 2, 1973	do	863	adequate	Plenty of water. Many rocks exposed for maximum use of eddies.
Green R. (105.1)	Palmer to Franklin Bridge (1st bridge below Palmer)	Nov. 27, 1971		1230	adequate	Good water flow. Considerable maneuvering at times to avoid rocks in a few places.
do	do	Mar. 18, 1973	do	692	minimum	*Water flow low. Run okay.
do	đo	Apr. 29, 1973	<b>do</b>	853	near minimum	Water flow marginal. Scraped on one major drop and a shallow, wide place in river.
do	do	May 12, 1973	do	1080	adequate	Most rocks in rapids covered enough. Probably easiest flow to get down river.
do	do	Nov. 24, 1973	do	479	below minimum	*Water flow low. Many drops at minimum flow. Several drops impossible to run clean.
đo	<b>d</b> o	Dec. 9, 1973	do	1750	adequate	Good water flow. Optimum. Difficulty level increases at this flow.
Green R. (105.2)	Franklin Bridge to Flaming Geyser Park	Mar. 21, 1971	do	700	adequate	Water low. Good run. Lots of rock exposures but can negotiate okay.
do	do	Oct. 3, 1971	do	412	near minimum	Water flow low. Lots of narrow chutes requiring precise maneuvering.
do	do	Oct. 24, 1971	do	575	adequate	Water low. Enough water to avoid scraping bottom.
do	do	Jan. 16, 1972	do	1090	adequate	Rocks covered even in lower 1/2 of run where river broadens out.
do	do	Mar. 25, 1972	do	2200	adequate	Plenty of water, challenging run at this flow.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

# GREEN RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Green R. (105.2)	Franklin Bridge to Flaming Geyser Park	May 14, 1972	Green R. below Howard Hansen Dam (12105900)	3840	adequate	Heavy water run.
do	do	July 16, 1972	do	1260	adequate	Excellent flow. Enough water to cover all rocks and good flow to "play" in current and waves.
do	do	Nov. 12, 1972	do	505	near minimum	Water low. Skill required to negotiate some drops and shallows.
do	do	Mar. 18, 1973	<b>d</b> o	692	adequate	Most of rocks covered. Can scrape bottom if negotiate incorrectly. Water not forceful, lots of nice eddies.
dо	do	Apr. 15, 1973	do	742	adequate	Good run for intermediate boaters. Most rocks covered in shallows in widest part of river.
do	do	Aug. 12, 1973	do	279	below minimum	Water too low. A total of 15 rapids had to be portaged or lined.
Green R. (105.3)	Flaming Geyser Park to Whitney bridge (2nd bridge below Park)	Sept. 26, 1970	do	225	below minimum	Water low. Run marginal; scraped bottom.
do	do	Nov. 1, 1970	đo	661	adequate	Good run. Easy flow to run river.
do	do	Apr. 7, 1971	do	1770	adequate	Good run. Swift current; one rapid nearly washed out.
do	do	Jun. 14, 1972	do	472	near minimum	Water low. Possible to run without scraping bottom.
do	do	Nov. 4, 1972	do	1360	adequate	Good run. Nice waves in last drop.
do	do	Dec. 2, 1972	do	1010	adequate	Good run. Probably near optimum level for good eddies and waves.
do	do	July 12, 1973	do	460	minimum	*Just enough water to negotiate.
đo	do	Sept. 23, 1973	do	225	below minimum	Water too low. Scraped bottom several places.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

# GREEN RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Green R. (105.3)	Flaming Geyser Park to Whitney bridge (2nd bridge below Park)	Nov. 24, 1973	Green R. below Howard Hansen Dam (12105900)	479	minimum	*Definite channel in every drop, but very low. Rocky drops hard to maneuver.
Cedar R. (119.0)	Landsburg to Maple Valley	Nov. 20, 1971	Cedar R. at Renton (12119000)	962	adequate	Rocks at this flow were mostly covered but enough exposure to require occasional alert rock dodging.
do	đo	Jan. 30, 1972	do	1300	adequate	Good "splashy" run; all rocks in shallow places covered. Wave formation at favorite "playspot" near railroad bridge near optimum.
đo	do	Feb. 19, 1972	do	1700	adequate	Good run. Many eddies along edge of river disappear at this flow.
do .	do	Mar. 24, 1973	do	380	below minimum	*Flow below minimum; boat dragged bottom in several rapids.
do	do	May 27, 1973	do ·	330	below minimum	Water low; scraped bottom in 5 rapids; beginner-intermediate boaters would especially have difficulty negotiating the rapids. Despite the scraping the water flow was probably close to minimum flow. A 20 percent increase in flow would be close to adequate.
do	do	Oct. 5, 1973	do	320	minimum	*Pleasant run, not much action, but rocks just barely covered. Note: evaluation does agree with above at 320 cfs on May 27.
do -	do	Nov. 3, 1973	do	390	minimum	Enough water to cover rocks in all rapids. How- ever, did take light bottom brushes in couple of rapids. Had to be careful to choose correct channels.
đo	do.	Nov. 18, 1973	do	300	below minimum	*Water flow low. Boat "basher".

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

### SNOHOMISH RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
South Fork of Skykomish R. (133.0)	Beckler R. and S. Fork Skykomish R. confluence to bridge at Baring	June 13, 1971	South Fork Skykomish near Index(12133000)	<b>56</b> 80	adequate	*Plenty of water; heavy water run.
do	do	June 30, 1973	do	1950	adequate	*Delightful run; plenty adequate flow.
do	do	July 21, 1973	do	998	minimum	*Marginal flow; just enough water to allow free floating without bottom dragging.
North Fork of Skykomish R. (134.0)	Bridge 0.1 mile above Howard Creek to con- fluence with South Fork Skykomish	Mar. 28, 1971	Skykomish R. near Gold Bar (12134500)	2920	near minimum	Rock dodging both in shoals and deeper chutes extremely tricky; scraped bottom in some of boulder-studded drops.
do	do	June 13, 1971	đo	9220	adequate	Heavy water turbulence requiring considerable expertise.
do	do	Nov. 12, 1972	do	2860	minimum	*Run near minimum flow, run very technical rock dodging.
do	do	May 19, 1973	do	7050	adequate	Heavy water technical run.
Skykomish R. (134.1)	Sunset Falls to rail- road bridge 0.3 mile below No Name Creek	Oct. 17, 1971	Skykomish R. near Gold Bar (12134500)	1170	minimum	Water low, quite rocky in shallow rapids but passable; river in lower half of run below Anderson Creek still quite runnable.
do	đo	Aug. 20, 1972	do	2010	adequate	Good low water flow; water covers most rocks in major rapids; rapid above Index bridge quite rocky but easy to maneuver around rocks; flow suitable for intermediate boaters.
do	do	Sept. 24, 1972	do	5470	adequate	Good heavy water run; waves and currents power- ful at this flow; rocks well-covered in shallow places. Mean discharge for day was 7020 cfs.
do	do	Oct. 1, 1972	do	3410	adequate	Good run. Water covers rocks in major drops as well as shallow rapids. Probably maximum flow for preferred low water.
do	do	Oct. 15, 1972	do	1900	adequate	Good low water flow; more rocks exposed in major drops requiring some alert maneuvering.
do	do	Apr. 1, 1973	do	1340	adequate	Good low flow run. Need nearly this much water for wide places in river.
do	do	May 17, 1973	do	9610	adequate	Very heavy water run, currents powerful and unstable. Some rapids washed out at this flow.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

SNOHOMISH RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation	
Skykomish R. (134.1)	Sunset Falls to rail- road bridge 0.3 mile below No Name Creek	June 24, 1973	Skykomish R. near Gold Bar (12134500)	4660	adequate	Good run. Compromise between heavy water and good "play spots".	
do	do	Aug. 12, 1973	do	913	minimum	*Low water. No bottom dragging. Considered minimum flow.	
do	do	Aug. 26, 1973	do	650	below minimum	Very technical run. Lots of glancing blows. Bottom dragging on two of the shallow rapids.	
do	đo	Oct. 20, 1973	do	1560	adequate	Low water, but enough water to negotiate all rapids. Probably ideal flow to run river with ease.	
Skykomish R. (134.2)	Railroad bridge 0.3 miles below No Name Creek to Gold Bar bridge	July 7, 1971	do	6080	adequate	Large waves and hydraulics; water unstable and forceful.	
do	do	Sept. 24, 1972	dо	5470	adequate	do	
do	do	June 30, 1973	do	3200	adequate	*Plenty of water. Good run.	
do	do	July 14, 1973	do	1980	adequate	*Low water. Enough water to negotiate drops.	
do	do	Aug. 8, 1973	do	957	below minimum	*Low water. Scraped bottom several times.	
do	do	Aug. 26, 1973	do	611	below minimum	*Low water. Had to portage rapid above Gold Bar bridge. Had to choose very careful course most of run.	
do	do	Oct. 21, 1973	do	2100	adequate	Low water. Flow only slightly above minimum. Many wide places in river require near this flow to cover rocks. 30 percent less flow closto minimum.	
Middle Fork of Snoqualmie R. (141.0)	Taylor River to concrete bridge above gaging station	Apr. 4, 1971	Middle Fork of Snoqualmie R. near Tanner (12141300)	820	adequate	Water covers most rocks in rapids.	
đo	do	June 20, 1971	đo	2790	adequate	River easily navigable at this flow.	
do	do	Feb. 4, 1973	do	434	near or below min- imum flow	Water low. Scraped bottom few places, but another 100-150 cfs probably would be adequate.	

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

# SNOHOMISH RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Middle Fork of Snoqualmie R. (141.0)	Taylor River to concrete bridge above gaging station	Feb. 18, 1973	Middle Fork of Snoqualmie R. near Tanner (1441300)	391	below minimum flow	River below minimum flow needed to run several rapids, portaged a few drops because of low water.
do	do	May 19, 1973	do	1890	adequate	*Ideal water flow; good run.
do	do	May 26, 1973	do	1260	adequate	Water flow adequate for entire run; no scraping bottom. At least this much water needed for one of rapids on river where river splits around island.
						•
Middle Fork of Snoqualmie R. (141.1)	Concrete bridge above gaging station to Tanner	April 4, 1971	do	820	near minimum and adequate	Low water flow; first 2 1/2 miles of river shallow and just passable. Lower 2/3 of run adequate.
do	do	Oct. 31, 1971	do	700	minimum	Low water flow; lots of rock exposure but manageable without scraping bottom.
do	do	June 27, 1971	do	1890	adequate	Good run. Wave formation on some rapids good.
đo	do	Jan. 14, 1973	do .	7280	adequate	Very heavy water; currents and turbulence forceful.
do	do .	Mar. 3, 1973	do	700	adequate	Water flow low but adequate for lower 2/3 of run (do not run upper 1/3 of section).
do	do .	May 12, 1973	do	1060	adequate	*Low water flow, but runnable.
do	do	July 1, 1973	do	830	adequate	*Low water flow. Delightful run.
do	do	July 28, 1973	do	375	below minimum	*Extreme difficulty making run.
do	do	Nov. 10, 1973	do	1520	adequate	Good low flow run. Wide rapids need nearly this much water to get down river with ease.
Middle Fork of Snoqualmie R. (141.2)	Tanner to North Bend (2nd bridge below Tanner)	June 27, 1971	do	1890	adequate	Good run.
đo	đo	July 19, 1972	do	1700	adequate	Rocks covered; rapids easy.
do	do	Mar. 3, 1973	đo	700	near minimum	Low water flow. River widens making it diffi- cult to pass over shoals without scraping bottom.

<sup>\*</sup>Personal communication with individual members of Washington Kayak Club.

# SNOHOMISH RIVER BASIN-

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
North Fork of Snoqualmie R. (142.0)	Campground above Deep Creek to swinging bridge	July 10, 1971	North Fork of Snoqualmie R. near Snoqualmie Falls(12142000)	1110	adequate	High water flow. Plenty of water to run chutes and ledges.
do	do	Dec. 30, 1972	do	550	adequate	Good run. Choices of routes to run more limited than around 1000 cfs.
do	do	Feb. 17, 1973	do	365	near minimum	Water low, but possible to negotiate rapids okay.
do	do	Mar. 25, 1973	do	227	below minimum	Water too low. Scraped bottom on number of occasions.
do	do	May 28, 1973	do	270	below minimum	do
South Fork of Snoqualmie R. (144.0)	Bridge at Edgewick Road to bridge at Cedar Falls road	June 23, 1971	South Fork of Snoqualmie R. near North Bend (12144000)	1480	adequate	Good run. Plenty of water.
do	do	May 17, 1972	do	1010	adequate	· <b>do</b>
do	do	May 11, 1973	do	538	near minimum	Low water flow. Rapids easy; scraped bottom once, but most places in shallows okay. Lots of exposed rocks.
Tolt R. (148.0)	Public Fish and Game access 3.0 miles be- low South and North Fork Tolt to Carnation	Apr. 16, 1972	Tolt R. near Carnation (12148500)	638	adequate	Enough water. Not much rock dodging.
do	do	Mar. 31, 1973	do	326	near minimum	Low water flow; just passable over wide shoals; correct choices of deep channels may be difficult for beginner.

# STILLAGUAMISH RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
South Fork Stillaguamish R. (161.0)	Boardman Creek to Verlot	July 3, 1971	Stillaguamish R. near Granite Falls (12161000)	922	adequate	Close to minimum flow. Enough water but had to choose route carefully at times.
do	do	Jan. 23, 1973	do	1630	adequate	River not exceptionally high but lots of water. Good run.
do	, do	Mar. 18, 1973	do	2600	adequate	Heavy class III water.
do	do	Apr. 7, 1973	do	539	below minimum	*Water too low. Scraped bottom in steeper rapids.
do	do	June 23, 1973	do	831	minimum	*Water low. Very technical run to get by rocks.
Sauk R. (186.0)	Bedal campground to confluence with Whitechuck R.	June 26, 1971	SKAGIT RIVER BASI Sauk River, above Whitechuck R. near Darring- ton (12186000)	2600	adequate	High water, good run.
do	do	July 9, 1972	do	2430	adequate	High water, challenging run for intermediate boaters.
do	do ·	July 2, 1973	do	.1020	adequate	*Preferred low flow, Good eddies, currents, and waves.
do	đo	July 28, 1973	đo	800	minimum	*Low water flow. Only one critical drop which needs more water to negotiate.
do	do	Aug. 11, 1973	do	500	below minimum	*Water low. Negotiation difficult.
do	do	Aug. 18, 1973	do	277	below minimum	Water low. Scraped bottom.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

# SKAGIT RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Sauk R. (189.0)	Confluence of Whitechuck R. and Sauk R. to Darrington	June 26, 1971	Difference be- tween Sauk R.near Sauk (12189500) and Suiattle R. above Big Creek near Darrington (12188400)	5510	adequate	High water. Heavy water run.
do	do	Aug. 27, 1972	do	1850	adequate	Probably most preferred low flow. Excellent run with plenty of water for good waves and eddies.
do	do	Apr. 7, 1973	do	1172	minimum or below	*Low water. Scraped in few shallow rapids.
do	do	May 5, 1973	₫o	2210	adequate	*Good low water flow. Can negotiate all rapids.
do	do	Aug. 4, 1973	do	1700	adequate	*Plenty of water, good run.
do	do	Aug. 19, 1973	do	945	below minimum	Scraped bottom on three or four rapids. Some drops real "squeakers". Average boater would have scraped more times. Most of run okay-probably another 200 cfs would be minimum.
Suiattle R. (188.0)	Sulfur Creek camp- ground to road crossing 1/2 mile upstream of All Creek	Sept. 4, 1971	Suiattle R. above Big Creek, near Darrington (12188400)	1010	near minimum	Water flow low. Portaged one boulder garden. Probably near minimum.
			METHOW RIVER BASI	N		
Methow River (449.0)	Wintrop to Twisp	July 1, 1972	Methow R. near Pateros (12449950)	5650	adequate	Plenty of water. Mostly swift moving water with occasional heavy water rapid.
do	do	July 28, 1973	đo	510	below minimum	*Water low. Much of this section was 12 to 18 inches deep. Scraped twice. Very marginal most of run. Had to pick correct channels or portage necessary.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

# METHOW RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Methow R. (449.1)	Twisp to bridge below Gold Creek	July 2, 1972	Methow R. near Pateros (12449950)	5200	adequate	Plenty of water. Heavy water run.
đo	do	July 14, 1973	do	900	adequate	Low water. Slightly above minimum flow. Some shallow wide stretches nearly marginal flow.
do	do	July 29, 1973	do	510	below minimum	*Low water. Minimum of scraping and no portag- ing necessary but had to be very careful at selecting proper channel.
Methow R. (449.2)	Gold Creek to 1st bridge above Pateros	July 14, 1973	do -	900	adequate	Low water. Most of run okay but scraped on two rapids. Must make judicious choice of channels. Narrower channel than upper part of river.
do	do	July 29, 1973	do	510	minimum	*Low water. Definitely runnable, but marginal.
			WENATCHEE RIVER	BASIN		
Chiwawa R. (457.0)	Goose Creek camp- ground to confluence with Wenatchee R.	Sept. 3, 1972	Wenatchee R. at Plain (12457000)	1620	near minimum	Water low. Just passable. Very technical in upper reaches of higher gradient.
do	do	July 22, 1973	do	690	adequate	*Plenty of water.
Wenatchee R. (457.1)	Plain to Tumwater Campground on Stevens Pass high- way	Oct. 9, 1971	Wenatchee R. at Plain (12457000)	660	adequate	Water low but enough for good run.
Wenatchee R. (457.2)	Tumwater Campground to Leavenworth at Icicle Creek Road	Oct. 10, 1970	do	561	below minimum	Water low. Most of run okay but occasional jagged rock chute had to be portaged.
do	đo	May 6, 1973	do	3150	adequate	*Water high. Heavy water with big waves. Portaged one drop.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

### WENATCHEE RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Wenatchee R. (459.0)	Leavenworth at Icicle Creek Road to Peshastin	July 18, 1971	Wenatchee R. at Peshastin (12459000)	11,000	adequate	*Water very high. Powerful waves and rapids.
do	do	Oct. 10, 1971	do	735	below minimum	Water low. A real "boat basher" on Chumstick rapid.
do	do	Sept. 2, 1972	do	1720	near minimum	Water low. Enough water to cover rock ledges on Chumstick rapids.
đo	do	May 6, 1973	do	4160	adequate	*Plenty of water. Some big waves and hydraulics.
do·	do	July 9, 1973	do	2450	adequate	Good run. Plenty of water to avoid scraping on Chumstick rapid.
do	<b>d</b> o	July 21, 1973	do	2330	adequate	Plenty of water.
			YAKIMA RIVER BAS	SIN		
Cle Elum R. (480.0)	Salmon La Sac camp- ground to bridge above Cle Elum Lake	May 30, 1971	<pre>#Teanaway R. be- low Forks, near Cle Elum (12480000)</pre>	( 955 )	adequate	Plenty of water, easily navigable.
do	do	June 4, 1972	đo	(1490)	adequate	Water high. Good "sloshy" waves in places.
do	do	June 10, 1973	do	( 202 )	minimum	Water extremely shallow over some riffles but just enough to avoid scraping.
do	do	June 27, 1973	do	(112)	minimum	*Water low. Just marginal for running.
Teanaway R. (480.1)	.3 mile above Teanaway R. on N. Fork Teanaway to Masterson Road	May 28, 1972	do	( 2770 )	adequate	Water high. Current velocity very fast.
do .	do	April 8, 1973	do	(318)	near minimum or below	*Water low. Scraped on few ledges.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.
# No gaging station above Cle Elum lake; Teanaway River used because it has drainage similar to Cle Elum River.

# YAKIMA RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
Tieton R. (491.0)	Below Rimrock Lake to Tieton Canal	Sept. 1, 1973	Tieton R., at Tieton Dam, near Naches (12491500)	650	adequate	Water flow low-to-moderate. Plenty of water. River with fast current and few eddies.
Tieton R. (492.0)	Tieton Canal to lst bridge below headworks of Tieton Canal on Hy. 12	Sept. 1, 1973	Tieton R. at headworks of Tieton Canal, near Naches (12492500)	318	near minimum	Water flow low. Generally enough water to run, but only marginally. Scraped bottom lightly a few times.
Yakima R. (479.0)	Teanaway R. junction 1/2 mile below Thorp R. bridge	July 2, 1973	Yakima R. at Cle Elum (12479500)	2900	adequate	*Plenty of water for good run.
do	do	Sept. 8, 1973	do	1530	adequate	* do
do	do	Oct. 21, 1973	Yakima R. at Cle Elum (12479500) + Teanaway R. near Cle Elum (12480000)	69 + 103	below minimum	Water low. Scraped lightly in many places. Didn't have to portage. Correct course must be carefully read. 250 cfs probably would be close to minimum flow.
			KALAMA RIVER BASIN	_		
Kalama R. (223.0)	Bridge above Wild Horse Creek to bridge at Summers Creek	Oct. 28, 1973	Kalama R. near Kalama (14223500)		adequate	Moderate water flow. Good run.
			COWLITZ RIVER BASII	<u>1</u>		
Cowlitz R. (226.0)	La Wis Wis Campground to Lake Creek on Cowlitz R.	July 19, 1970	Cowlitz R. at Packwood (14226500)	1220	adequate	*Plenty of water.
co	co .	Apr. 21, 1973	do	836	adequate and minimum	Water flow low. Upper Cowlitz adequate water flow. Below Muddy Fork much wider river with braided channel and run was marginal.
do	do	Dec. 28, 1973	do	1880	adequate	*Water not high. No bottom scraping on run.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

# COWLITZ RIVER BASIN

River	Segment	Date	Gaging Station	Flow (cfs)	Adequacy of Flow	Explanation
North Fork Toutle R. (242.0)	Al Raught Park to Kid Valley Park	Aug. 10, 1970	Toutle R. near Silver Lake (14242500)	380	below minimum	Low water flow. Technical run.
do	do	Oct. 29, 1973	do	1300	minimum	Low water flow. Several light bottom touches. Never dragged excessively or stopped completely.
Toutle R. (242.1)	0.7 miles downstream from confluence of N. and S. Fork to bridge on Tower Hill Road	Aug. 23, 1970	do	352	below minimum	*Water low. Portaged one rapid.
do	do	May 23, 1971	do	2720	adequate	* Water high. Heavy water run.
đо	_ <b>d</b> o	Apr. 22, 1973	<b>d</b> o	1993	adequate	Water optimum. Good run. Probably above preferred low flow range.
đo	do	Oct. 27, 1973	do	1300	adequate	Low water flow. Above minimum flow; however, did scrape slightly on a couple of wide rapids.

<sup>\*</sup> Personal communication with individual members of Washington Kayak Club.

# EXHIBIT D

Comparison of Rating Values for Whitewater Streams Inventoried

# COMPARISON OF RATING VALUES FOR WHITEWATER STREAMS INVENTORIED

River	River	Total Rank	Riverscape Interest	River Channel Interest	Freedom From Shore and River Channel Modifi- cations and Pol- lution Evidence	Human Use Factors
105.2	Green, Lower Gorge	294	87 #	99 # ·	68 <i>#</i>	40 #
105.1	Green, Upper Gorge	280	87 #	93 #	62 #	38 #
142.0	N.F. Snoqualmie	278	84 #	90 #	67 #	37
186.0	Sauk, Upper	275	81 #	87 #	70 #	37
189.0	Sauk, Middle	267	78 #	93 #	56	40 #
168.0	Pilchuck Creek	266	84 #	84 #	65 #	33 .
035.0	Canyon	264	81 #	75	70 #	38 #
141.0	M.F. Snoqualmie, Upper	261	84 #	90 #	52	35
141.1	M.F. Snoqualmie, Middle	260	72	93 #	58	37
242.1	Toutle	249	78	7.5	59 #	37
134.0	N.F. Skykomish	247	78	81	53	35
134.1	Skykomish, Sunset Falls	245	84 #	81	44	39 #
161.0	S.F. Stillaguamish	242	84 #	87 #	44	27
188.0	Suiattle	236	66	72	58	40 #
035.1	W.F. Satsop	233	66	60	67 #	40 #
223.0	Kalama, Upper	230	72	78	47	33
457.0	Chiwawa	229	54	78	64 #	33
480.0	Cle Elum	226	72	78	47	33
480.1	Teanaway	225	66	72	58	30
134.2	Skykomish, Big Eddy	218	69	69	46	34
036.0	Wynoochee	216	60	51	67 #	38 #
492.0	Tieton, Middle	215	60	84 #	41	30
088.0	Nisqually, Middle	213	57	66	52	36
242.0	N.F. Toutle	211	60	78	32 44	29
491.0	Tieton, Upper	211	60	78 78	44	29
457.1	Wenatchee, Upper	208	60	60	50	38 #
226.1	Cowlitz, Upper	205	57	66	50	30 v
105.0	Green, Upper	198	54	69	37	38
148.0	Tolt	197	54	75	38	30
449.2	Methow, Lower	197	54	69	37	37
105.3	Green, Lower	196	54	63	44	35
070 0	Danahutan	10/		pr =>2	47	2.0
079.0	Deschutes S. F. Changeland	194	54	57 70	47	36
144.0	S.F. Snoqualmie	191	51	78 70	35	27
119.0	Cedar	190	51	72 63	41	26
449.1	Methow, Middle	186	51 57	63	37	35
457.2	Wenatchee, Tumwater Canyon	180	57	60	35	28
479.0 093.0	Yakima, Upper	177	51	51	36	39 #
449.0	Puyallup, Upper	174	39 51	57 51	43	35
141.2	Methow, Upper	174	51 48	51	37	35
459.0	M.F. Snoqualmie, Lower	169	48 42	60 54	32 30	29
マンフ・ロ	Wenatchee, Lower	158	42	J4	<b>3</b> 0	32

<sup>#</sup> Ten highest ranked rivers in respective categories.