

Appendix C – Instream Flow Management Recommendations

Under the Level 2 Instream Flow Assessment, the WRIA 35 Planning Unit developed a preliminary stream flow management strategy to integrate into the Middle Snake River Watershed Management Plan. Additional meetings and discussions with the agencies (Ecology and WDFW) were subsequently conducted to finalize the recommendations documented in this Watershed Plan. Over the course of three years, the Planning Unit participated in meetings and workshops to develop management objectives and strategies consistent with the Watershed Planning Act, which calls for strategies that address in-stream flow needs for fish and out-of-stream needs for people. The specific recommendations for each implementation area are presented in this appendix to the plan, as noted in Section 6 – Implementation Area Strategies.

Initially, the streamflow management framework for WRIA 35 had three main components: (i) minimum instream flows (instream flows); (ii) closures with provisions; and (iii) flow enhancement targets. Irrigation use is relatively limited in the watershed, and many water efficiency measures have been successfully implemented with conserved water placed in the trust water program. Continuation of this effort and other non-regulatory strategies can enhance flows.

Based on the integration of the management components, the stream flow management framework includes the following general recommendations for WRIA 35:

- Recommend Ecology promulgates an administrative rule defining restrictions on issuance of new water rights based on instream flows for those streams with currently available streamflow data and instream flow studies (IFIM). These streams include Tucannon River (MP-1a, MP-1b and MP-3) and Asotin Creek (MP-12). Refer to the implementation area-specific discussions below for details of the instream flow recommendations. See Exhibit C-1 for locations of the management points.
- Recommend Ecology promulgates an administrative rule defining year-round “closures” (with provisions) that restrict issuance of new water rights in other streams/basins which have been identified as priorities for habitat protection or restoration within the Asotin Creek Implementation Area. Closures are applied to streams/basins that lack sufficient stream gage data and instream studies. These streams/basins include: North Fork Asotin Creek (and tributaries), South Fork Asotin Creek (and tributaries), and Charley Creek (from WDFW property to headwaters). See Exhibit C-2 for the locations of the streams recommended for closure.
- Recommend that, as funding becomes available, additional instream flow studies be conducted at salmonid-bearing streams with existing stream flow gauges. These instream studies can be used to develop instream flows at a later date and replace or augment the protections gained from closures alone. The Planning Unit is recommending specifically that minimum instream flows be developed for the following tributaries: Charley Creek, George Creek, Pintler Creek, Alpowa Creek, Almota Creek, Pataha Creek, and Joseph Creek (in

Washington). See Exhibit C-3 for locations of streams recommended for future instream flows.

- Some smaller streams and tributaries that were not identified as priorities for restoration or protection under the Subbasin Plan (and were not assigned a management point under this framework) were not specifically analyzed in this assessment. The Planning Unit did not have a recommendation for closure or minimum instream flows at this time; however, Ecology and Fish & Wildlife should address these water bodies on a case-by-case basis in the future as applicants apply for new water rights.
- Recommend the continued stream flow monitoring at all existing gauges in WRIA 35 to allow continued data collection for future instream flow analyses. The flow data would be used to potentially define instream flows in those streams that currently only have recommended closures due to a lack of stream flow data. Instream flow studies would also have to be conducted.
- Recommend that instream flows, closures and provisions (water reservations) be reviewed and evaluated every five years or as appropriate as new data is collected.

The following subsections summarize the recommendations for each implementation area in WRIA 35.

Asotin Creek Implementation Area

The instream flow recommendations specific to the Asotin Creek implementation area were developed as described in the assessment documents listed in Section 2. Instream flow recommendations for Asotin Creek implementation area include:

- Recommend interim minimum instream flow for Asotin Creek at the mouth to restrict issuance of water rights at all points upstream to the forks protect fisheries resources.
- Recommend year-round stream closures for North Fork Asotin Creek, South Fork Asotin Creek (including tributaries) and Charley Creek. North Fork and South Fork Asotin Creek will be closed from the confluences with Asotin Creek to the headwaters. Charley Creek would be closed from the start of the WDFW property to the headwaters.
- Recommend setting minimum instream flows in the future for Charley Creek, George Creek and Pintler Creek as additional data is collected.

Table C-1 summarizes the proposed minimum instream flows and focal species used as the basis for the recommended interim minimum instream flows for Asotin Creek at the mouth (MP-12). The minimum instream flows are based on the 40% exceedance value for each month. The WRIA 35 Planning Unit understands the importance of ESA listed species within streams and rivers in Southeastern Washington. Citizens in this WRIA have been recognized locally and nationally for their habitat restoration and protection projects regarding complex habitat issues associated with anadromous salmonids. Many of these same citizens have also participated in the development of limiting factors analysis, subbasin plans, and regional recovery plans and recognize that there are many factors, including instream flows, which affect the health of

salmonid populations. Existing instream flows have not been identified in these plans as a primary factor limiting salmonid production for the mainstems of Asotin Creek.

To further enhance fish habitat, the Planning Unit has established instream flows with the intent of potentially recovering and enhancing populations within the freshwater life-stages. The instream flows that have been approved are reliable, attainable, and defensible and reflect and protect the hydrograph and existing flows. In order to protect/enhance migration and channel forming flows, it is the Planning Units intent that new surface water rights should not be allocated if WDFW and/or Ecology document that the potential new withdrawals are detrimental to ESA listed species.

WDFW considers any new withdrawals during the low flow months (July – Oct) would impact fish and habitat. WDFW has agreed to 40% exceedance flows for Asotin Creek based on the understanding that no new water rights would be issued during the low flow period. Historical flow gauge data on Asotin Creek has indicated that stream flows during the summer and fall can be very limited. Ecology as a general policy does not allocate water when water is not available more than half of the time during the months the applicant is requesting to use it. These flows may be considered interim until such time that new instream flow analyses are completed.

Ecology is required to consult with WDFW regarding the issuance of water rights. However, Ecology ultimately has the authority to make the final decision. A statement accompanying instream flows on Asotin Creek would serve to caution prospective applicants that obtaining new water rights during this period of time will be difficult.

Table C-1
Minimum Instream Flows Recommendations for Asotin Creek (MP-12)
Asotin Creek @ RM .02 (Mouth of Asotin Creek, Bridge on HWY 129 to North and South Forks)

	Exceedance Values for Asotin Creek			Focal Species	WUA for focal species			Planning Unit Recommendation
	10%	50%	90%	Reference Lifestage	90%	95%	100%	40 % Exceedance
October	51 cfs	38 cfs	27 cfs	FCH-M/S/I, BT-M/R, SH-M/R, SCH-R/I	55 cfs	76 cfs	90 cfs	40 cfs
November	63 cfs	41 cfs	29 cfs	FCH-M/S/I, BT-M/R, SH-M/R, SCH-R/I	55 cfs	76 cfs	90 cfs	43 cfs
November	116 cfs	45 cfs	30 cfs	FCH-M/S/I, BT-M/R, SH-M/R, SCH-R/I	60 cfs	65 cfs	80 cfs	46 cfs
December	275 cfs	48 cfs	34 cfs	SH-S/M/R, BT-M/R, SCH-R/I, FCH-I	75 cfs	80 cfs	90 cfs	50 cfs
January	335 cfs	55 cfs	33 cfs	SH-S/M/R, BT-M/R, SCH-R/I, FCH-I	75 cfs	80 cfs	90 cfs	63 cfs
February	426 cfs	79 cfs	36 cfs	SH-S/M/R/I, BT-M/R, SCH-R/I, FCH-I	75 cfs	80 cfs	90 cfs	93 cfs
March	337 cfs	114 cfs	49 cfs	SH-S/M/R/I, BT-M/R, SCH-R/M/I, FCH-I	75 cfs	80 cfs	90 cfs	131 cfs
April	396 cfs	147 cfs	78 cfs	SH-S/M/R/I, BT-M/R, SCH-R/M, FCH-I	75 cfs	80 cfs	90 cfs	173 cfs
May	481 cfs	160 cfs	69 cfs	SH-S/M/R/I, BT-M/R, SCH-R/M, FCH-I	75 cfs	80 cfs	90 cfs	176 cfs
June	360 cfs	84 cfs	38 cfs	SCH-M/R, SH-S/M/R/I, BT-M	60 cfs	65 cfs	80 cfs	92 cfs
July	136 cfs	52 cfs	33 cfs	SCH-M/R, SH-R	60 cfs	65 cfs	80 cfs	54 cfs
July	67 cfs	40 cfs	28 cfs	SH-R, SCH-R	55 cfs	76 cfs	90 cfs	42 cfs
August	49 cfs	34 cfs	25 cfs	SH-R, SCH-R	55 cfs	76 cfs	90 cfs	35 cfs
September	45 cfs	35 cfs	26 cfs	SH-R, SCH-S/R/I	60 cfs	65 cfs	80 cfs	37 cfs

Notes:

Allocation limit of a cumulative of 18 cfs from December through June only for consumptive purposes within the Asotin Creek watershed.

Focal Species

FCH = Fall Chinook

SCH = Spring Chinook

SH = Steelhead Trout

BT = Bull Trout

Life History Phase

Spawning = S

Rearing = R

Migration = M

Incubation = I

Middle Snake River Implementation Area

The instream flow recommendations specific to the Middle Snake River implementation area were developed as described in the assessment documents listed in Section 2. Instream flow recommendations for Middle Snake River implementation area include:

- No recommended year-around stream closures for the implementation area at this time.
- Recommend setting minimum instream flows in the future for Alpowa Creek and Almota Creek as additional data is collected, and instream flow studies completed.

Pataha Creek Implementation Area

The instream flow recommendations specific to the Pataha Creek implementation area were developed as described in the assessment documents listed in Section 2. Flow recommendations for Pataha Creek implementation area include:

- No recommended year-around stream closures for the implementation area at this time.
- Recommend setting minimum instream flows in the future for Pataha Creek as additional data is collected, and instream flow studies completed.

Tucannon River Implementation Area

The instream flow recommendations specific to the Tucannon River implementation were developed as described in the assessment documents listed in Section 2. Instream flow recommendations for Tucannon River implementation area include:

- Recommend minimum instream flow for three locations on the mainstem Tucannon River: MP-1a at the mouth, MP-1b at Territorial Rd. to Marengo, and MP-3 from Marengo to the headwaters. The instream flows restrict issuance of water rights at all points upstream of the management point.
- No recommended year-around stream closures for the implementation area.
- No recommended minimum instream flows at other streams in the implementation area at this time.

Tables C-2a to C-2c summarize the exceedance flows and focal species used as the basis for the recommended interim minimum instream flows for the Tucannon River management points. Specific exceptions and notes are included in the tables.

Table C-2a
Minimum Instream Flows Recommendations for Tucannon River at mouth (MP-1a)
Tucannon River @ Mouth to Territorial

	Exceedance Values for Smith Hollow			Focal Species	WUA for focal species			Planning Unit Recommendation
	10%	50%	90%	Reference Lifestage	90%	95%	100%	90%
October	99 cfs	78 cfs	57 cfs	FCH-M, BT-M/R, SH-M/R, SCH-R/I	75 cfs	80 cfs	105 cfs	78 cfs
October	109 cfs	84 cfs	65 cfs	FCH-M/S/I, BT-M/R, SH-M/R, SCH-R/I	75 cfs	80 cfs	105 cfs	84 cfs
November	147 cfs	100 cfs	79 cfs	FCH-M/S/I, BT-M/R, SH-M/R, SCH-R/I	75 cfs	80 cfs	105 cfs	95 cfs
December	258 cfs	121 cfs	80 cfs	SH-S/M/R, BT-M/R, SCH-R/I, FCH-S/I	75 cfs	80 cfs	105 cfs	95 cfs
January	410 cfs	140 cfs	80 cfs	SH-S/M/R, BT-M/R, SCH-R/I, FCH-I	75 cfs	80 cfs	105 cfs	110 cfs
February	479 cfs	185 cfs	101 cfs	SH-S/M/R, BT-M/R, SCH-R/I, FCH-I	75 cfs	80 cfs	105 cfs	110 cfs
March	429 cfs	203 cfs	121 cfs	SH-S/M/R, BT-M/R, SCH-R/M, FCH-I	75 cfs	80 cfs	105 cfs	110 cfs
April	445 cfs	234 cfs	144 cfs	SH-S/M/R/I, BT-M/R, SCH-R/M, FCH-R	75 cfs	80 cfs	105 cfs	110 cfs
May	493 cfs	248 cfs	143 cfs	SH-S/M/R/I, BT-M/R, SCH-R/M, FCH-R	75 cfs	80 cfs	105 cfs	110 cfs
June	412 cfs	203 cfs	88 cfs	SH-S/M/R/I, BT-M, SCH-M	65 cfs	73 cfs	85 cfs	110 cfs
June	273 cfs	125 cfs	65 cfs	SH-M/R, BT-M, SCH-M	65 cfs	75 cfs	90 cfs	75 cfs*
July	159 cfs	85 cfs	51 cfs	SH-R, SCH-M	65 cfs	75 cfs	90 cfs	75 cfs*
July	108 cfs	64 cfs	45 cfs	SH-R	65 cfs	75 cfs	90 cfs	65 cfs
August	87 cfs	58 cfs	38 cfs	SH-R	65 cfs	75 cfs	90 cfs	65 cfs
September	90 cfs	65 cfs	45 cfs	SH-R/M, SCH-S/R/M	65 cfs	75 cfs	90 cfs	65 cfs
September	93 cfs	72 cfs	53 cfs	SH-M/R, SCH-S/R/I	75 cfs	80 cfs	105 cfs	75 cfs

Notes:

* Surface Water Closure with Exceptions and note in rule that address future migration studies

Allocation Limit of a cumulative of 18 cfs for November, 25 cfs for December and 30 cfs for January through June 15th for MP 1a, 1b and 3 for new surface water rights for November through first half of June only for consumptive purposes within the Tucannon watershed.

Focal Species

Life History Phase

FCH = Fall Chinook
 SCH = Spring Chinook
 SH = Steelhead Trout
 BT = Bull Trout

Spawning = S
 Rearing = R
 Migration = M
 Incubation = I

Table C-2b
Minimum Instream Flows Recommendations for Tucannon River at Territorial Rd. (MP-1b)
Tucannon River from Territorial Rd. to Marengo

	Exceedance Values for Smith Hollow			Focal Species	WUA for focal species			Planning Unit Recommendation
	10%	50%	90%	Reference Lifestage	90%	95%	100%	90%
October	99 cfs	78 cfs	57 cfs	FCH-M, BT-M/R, SH-M/R, SCH-R/I	75 cfs	80 cfs	105 cfs	80 cfs
November	109 cfs	84 cfs	65 cfs	FCH-M/S/I, BT-M/R, SH-M/R, SCH-R/I	75 cfs	80 cfs	105 cfs	95 cfs
December	258 cfs	121 cfs	80 cfs	FCH-S/I, BT-M/R, SH-S/M/R, SCH-R/I	75 cfs	80 cfs	105 cfs	95 cfs
January	410 cfs	140 cfs	80 cfs	SH-S/M/R, BT-M/R, SCH-R/I, FCH-I	75 cfs	80 cfs	105 cfs	110 cfs
February	479 cfs	185 cfs	101 cfs	SH-S/M/R, BT-M/R, SCH-R/I, FCH-I	75 cfs	80 cfs	105 cfs	110 cfs
March	429 cfs	203 cfs	121 cfs	SH-S/M/R, BT-M/R, SCH-R/M, FCH-I	75 cfs	80 cfs	105 cfs	110 cfs
April	445 cfs	234 cfs	144 cfs	SH-S/M/R/I, BT-M/R, SCH-R/M, FCH-R/M	75 cfs	80 cfs	105 cfs	110 cfs
May	493 cfs	248 cfs	143 cfs	SH-S/M/R/I, BT-M/R, SCH-R/M, FCH-M	75 cfs	80 cfs	105 cfs	110 cfs
June	412 cfs	203 cfs	88 cfs	SCH-R, SH-S/M/R/I, BT-M	65 cfs	73 cfs	85 cfs	110 cfs
June	273 cfs	125 cfs	65 cfs	SCH-R, SH-M/R, BT-M	65 cfs	75 cfs	90 cfs	85 cfs*
July	159 cfs	85 cfs	51 cfs	SH-R, SCH-M/R	65 cfs	75 cfs	90 cfs	85 cfs*
July	108 cfs	64 cfs	45 cfs	SH-R, SCH-R	65 cfs	75 cfs	90 cfs	75 cfs
August	87 cfs	58 cfs	38 cfs	SH-R, SCH- S/R	65 cfs	75 cfs	90 cfs	65 cfs
September	90 cfs	65 cfs	45 cfs	SH-M/R, SCH-S/R/I	65 cfs	75 cfs	90 cfs	75 cfs

Notes:

* Surface Water Closure with Exceptions and note in rule that address future migration studies

Exceedance Values for MP – 1b might change at a future date if and when we get a gauge at Territorial Road.

Allocation Limit of a cumulative of 18 cfs for November, 25 cfs for December and 30 cfs for January through June 15th for MP 1a, 1b and 3 for new surface water rights for November through first half of June only for consumptive purposes within the Tucannon watershed.

Focal Species

Life History Phase

FCH = Fall Chinook

Spawning = S

SCH = Spring Chinook

Rearing = R

SH = Steelhead Trout

Migration = M

BT = Bull Trout

Incubation= I

Table C-2c
Minimum Instream Flows Recommendations for Tucannon River at Marengo (MP-3)
Tucannon River from Marengo to Headwaters**

	Exceedance Values for Smith Hollow			Focal Species	WUA for focal species		Planning Unit Recommendation
	10%	50%	90%	Reference Species and Lifestages***	90%	100%	
October	99 cfs	65cfs	56 cfs	BT-S/M/R, SH-M/R, SCH-M/R/I	53 cfs	110 cfs	99 cfs
November	237 cfs	76 cfs	62 cfs	BT-M/R/I, SH-M/R, SCH-M/R/I	65 or 180 cfs	250cfs +	100 cfs*
December	206 cfs	82 cfs	57 cfs	BT-M/R/I, SH-M/R, SCH-M/R/I	65 or 180 cfs	250cfs +	110 cfs*
January	377 cfs	87 cfs	59 cfs	SH-S/M/R, BT-M/R/I, SCH-M/R/I,	88 cfs	111-120cfs	110 cfs*
February	300 cfs	106 cfs	62 cfs	SH-S/M/R, BT-M/R/I, SCH-M/R/I,	88 cfs	111-120cfs	110 cfs*
March	290 cfs	138 cfs	67 cfs	SH-S/M/R/I, BT-M/R/I, SCH-R/M,	88 cfs	111-120cfs	110 cfs*
April	357 cfs	184 cfs	101 cfs	SH-S/M/R/I, BT-M/R/I, SCH-R/M,	88 cfs	111-120cfs	110 cfs*
May	383 cfs	207 cfs	107 cfs	SH-S/M/R/I, BT-M/R/I, SCH-R/M,	88 cfs	111-120cfs	110 cfs*
June	248 cfs	113 cfs	67 cfs	SCH-M/R, SH-S/M/R/I, BT-M/R/I	88 cfs	111-120cfs	110 cfs*
July	94 cfs	64 cfs	48 cfs	SH-R/I, SCH-M/R, BT-M/R	88 cfs	111-120cfs	94 cfs
August	66 cfs	55 cfs	43 cfs	SH-R, SCH- S/R, BT-S/M/R	77 cfs	100cfs	77 cfs
September	86 cfs	58 cfs	49 cfs	SH-R, SCH-S/R/I, BT-S/M/R	77 cfs	100 cfs	86 cfs

Notes:

- * Allocation Limit of a cumulative of 18 cfs for November, 25 cfs for December and 30 cfs for January through June for MP 1a, 1b and 3 for new surface water rights for November through June only for consumptive purposes within the Tucannon watershed.
- ** The Planning Unit recommendations for MP-3 are predicated on the conviction that the corresponding reach is vital to the survival of three populations of ESA listed salmonid species in the Tucannon River.
- ***The IFIM methodology directs the user to consider migration flows, however, the PHABSIM model, which generates the Weighted Usable Areas (WUA's) used in the table does not consider migration flows for adults or juveniles. WDFW is required to protect all species during all of their natural life stages; therefore the Weighted Usable Areas (WUA's) listed in the table should only be used for spawning and rearing and not for migration.

<u>Focal Species</u>	<u>Life History Phase</u>
FCH = Fall Chinook	Spawning = S
SCH = Spring Chinook	Rearing = R
SH = Steelhead Trout	Migration = M
BT = Bull Trout	Incubation = I

Grande Ronde

The instream flow recommendations specific to the Grande Ronde implementation area were developed as described in the assessment documents listed in Section 2. Instream flow recommendations for Grande Ronde implementation area include:

- No recommended year-around stream closures for the implementation area at this time.
- Recommend that instream flows for the Grande Ronde and Joseph Creek be looked at in the future after more study and analysis is done.





