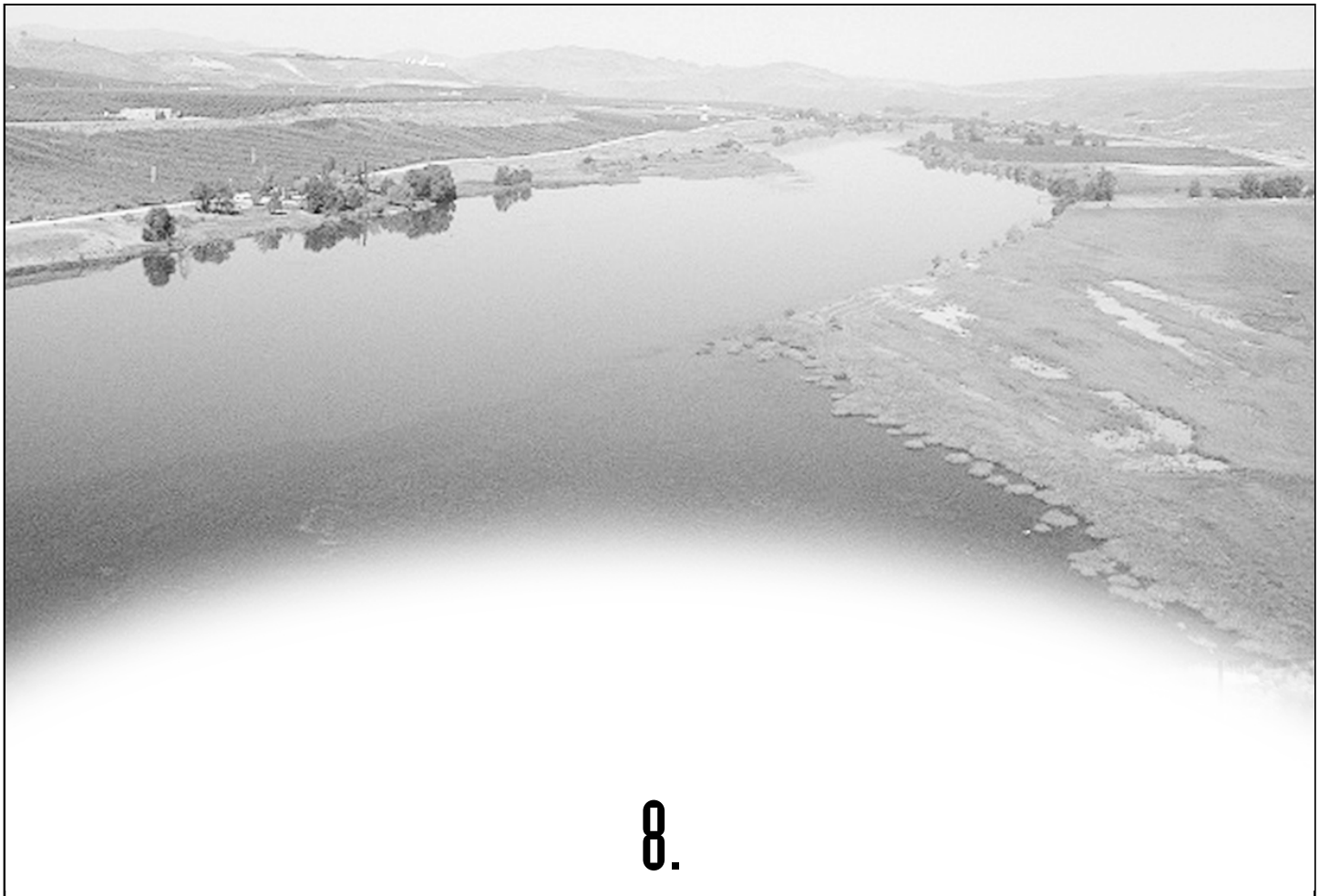

8. Alternatives Considered

Chief Joseph Dam Hatchery Program
MASTER PLAN

8

Alternatives Considered

8.1 BASIS FOR CHOOSING ALTERNATIVES

In proposing the CJDHP the Colville Tribes seek to meet both conservation and harvest goals. The conservation goal is to increase the abundance, distribution and diversity of naturally-spawning summer/fall Chinook in the Okanogan and Columbia rivers. The harvest goal is to increase and stabilize tribal ceremonial and subsistence fisheries, and local recreational fisheries.

Summer/fall Chinook populations in the Okanogan subbasin are presently supported by a single artificial production program at the Similkameen Pond which is inadequate to meet the Colville Tribes' ceremonial or subsistence fishery needs, and which does not appear to support the sustainability of naturally-spawning populations in the subbasin [see previous discussions in Chapters 5 and 6].

In selecting the alternative presented in the CJDHP, among many other factors, the Colville Tribes considered:

1) The ability of different approaches to meet the Colville Tribes' conservation and harvest goals.
2) The ability of different approaches to address specific limiting factors (e.g. nine downstream dams, uneven and inadequate distribution through historical habitat).
3) The ability of various alternate approaches to meet the unmet mitigation obligations of the federal government.
4) The ability of various alternatives to correct other long-standing mitigation inequities.
5) The relative risks of various alternatives to natural-origin salmon and steelhead in the Okanogan and neighboring subbasins.
6) The relative costs of various approaches.
7) The level of flexibility afforded by various approaches.

8.2 STRATEGIC ALTERNATIVES SUMMER/FALL CHINOOK

As noted at the outset of this document, the CJDHP is based on an integrated management strategy articulated through the summer/fall Chinook HGMP. Prior to development of the Okanogan Summer/Fall Chinook HGMP, three strategic alternatives were developed. The Colville Tribes evaluated those alternatives to arrive at the proposed CJDHP. This proposal is a combination of Alternative 2 and Alternative 3, which are summarized below.

8.2.1 ALTERNATIVE 1. DISPERSE EXISTING SUMMER CHINOOK PRODUCTION

This option addresses integrated recovery goals. The goals of this program would be to 1) make greater and more efficient use of potential spawning and rearing habitat in the Okanogan River, 2) develop a locally adapted brood stock for the Okanogan basin, and 3) provide added tribal and sport fishing opportunity.

Under this alternative, additional acclimation facilities would be developed downstream from the confluence of the Similkameen River. Existing mitigation production, which is currently released at Columbia River mainstem locations, would be moved into the Okanogan River. Current smolt releases in the Similkameen River would be dispersed to minimize redd superimposition. Tribal and sport harvest would be expanded when appropriate and would target

adipose-clipped, hatchery-origin Chinook. Broodstock would be trapped in the Similkameen and/or Okanogan rivers to develop a summer/fall Chinook population adapted to environmental conditions unique to the Okanogan basin.

8.2.2 ALTERNATIVE 2. EXPAND SUMMER CHINOOK PRODUCTION

This alternative includes integrated recovery, integrated harvest, and isolated harvest components. The goals of this program would be to 1) make greater and more efficient use of potential spawning and rearing habitat in the Okanogan River, 2) develop a locally adapted broodstock for the Okanogan basin, and 3) provide added tribal and sport fishing opportunity.

The integrated harvest components would include the integrated recovery actions listed in Alternative 1, but would also expand production to provide improved selective fishing opportunities. Under this alternative some of the production would be released as sub-yearlings to mimic the natural life history of the summer/fall Chinook and make use of the rearing capacity of the Columbia River reservoirs.

The goal of the isolated harvest components would be to 1) increase tribal and sport fishing in the Columbia River between the confluence of the Okanogan River and Chief Joseph Dam and 2) increase production for possible later smolt releases above Chief Joseph Dam. Under this alternative, propagation facilities would be constructed at a new or existing hatchery site. Adipose-clipped, hatchery-origin summer Chinook would be acclimated and released below Chief Joseph Dam for subsequent harvest by tribal members and sport anglers. Tribal anglers could also make use of new, selective trap nets in addition to the current hook and line methods employed at the dam.

8.2.3 ALTERNATIVE 3. INTEGRATE FALL CHINOOK PRODUCTION

The goals of this integrated program would be to 1) propagate the late arriving summer/fall Chinook for acclimation and release into the lower Okanogan River and Columbia River, and 2) increase tribal and sport fishing opportunity.

Under this alternative, later arriving, fall-type Chinook would be propagated, acclimated, and released to supplement spawning in the lower Okanogan River and the Columbia River above Brewster. This program would ensure the entire life history template of the summer/fall Chinook is maintained in the upper Columbia region. Juveniles would be released as both yearlings and sub-yearlings. Broodstock would be collected initially at Wells Dam. This broodstock would also be available for potential use above Chief Joseph Dam. Harvest would be selective, targeting adipose-clipped, hatchery-origin Chinook. Additional acclimation sites on the lower 25 miles of the Okanogan River would be added to acclimate the later-arriving Chinook.

8.3 OTHER ALTERNATIVES CONSIDERED

Discussion of alternatives considered in relationship to the development of the water supply and hatchery facility design are discussed in Chapter 11. Alternatives considered regarding the spring Chinook programs are included in Chapter 13.