

Hanford Reach Fall Chinook Protection Program Agreement	Fall Chinook	October – June
Bonneville	Fall Chinook	October - May

4. Columbia River System Operations

4.1 Priorities

The 2020 CRS BiOps considered the following strategies for flow management:

1. Provide minimum project flows in the fall and winter to support fisheries below the storage projects (e.g., Hungry Horse, Dworshak, Albeni Falls, and Libby). Limit the winter/spring drawdown of storage reservoirs to increase spring flows and the probability of reservoir refill.
2. Draft from storage reservoirs in the summer to increase summer flows.
3. Provide adequate flows in the fall and winter to support mainstem chum spawning and incubation below Bonneville Dam.

To implement these strategies, the AAs have developed the following priorities (in order) for flow management and individual reservoir operations after ensuring adequate FRM is provided:

1. Operate storage projects to meet minimum flow and ramp rate criteria for resident fish.
2. Attempt to refill the storage projects by the end of June/early July (exact date to be determined during in season management) to provide summer flow augmentation consistent with available water supply, spring operations, and FRM requirements (2020 NMFS BiOp, page 52). For example, a late snowmelt runoff may result in a later refill to prevent excessive spill. Target refill dates for the storage projects are listed below in Table 5.
3. Operate storage projects to be at their FRM elevation in early April (the exact date to be determined during in-season management) to maximize flows for the spring out-migration of juvenile salmon (2020 NMFS BiOp, page 52²).
4. Operate Grand Coulee to balance the needs of chum flow augmentation and spring flow augmentation from the start of chum spawning in November through the end of chum emergence (approximately April) to maintain sufficient water depth to protect chum spawning and incubation habitat at the Ives Island complex below Bonneville Dam.

Operations are intended to benefit ESA-listed anadromous fish and to benefit ESA-listed resident fishes (e.g., bull trout, Kootenai River white sturgeon) that may be affected by CRS operations. Projects are also operated to meet minimum outflows; avoid involuntary spill and resulting

² The citations provided herein refer to the description of the Proposed Action as summarized in the relevant BiOp(s). For a full description of the Proposed Action, see the 2020 CRS BA.