

Statement of Agreement

Wells Reservoir White Sturgeon Supplementation 2023-2026

Date: March 9, 2022

Douglas PUD will release 325 ($\pm 10\%$) white sturgeon into the Wells Reservoir annually between 2023 and 2026 (Brood Years 2022-2025) to complete the supplementation goals in the first four years of Phase II of the White Sturgeon Management Plan. Douglas PUD will rear fish to a target of ≥ 350 grams/fish. Fish used during this period of supplementation will be captured as wild larval fish (born in river) and raised at the Wells Fish Hatchery for approximately 11 months prior to release into the Wells Reservoir section of the Columbia River. Wild caught larvae from Lake Roosevelt will be used to meet this program. If stocking numbers cannot be met in a given year the Aquatic SWG will discuss revising stocking numbers in the subsequent year. Aquatic SWG members can request reconsideration of this SOA at any time during the supplementation period.

Background

From 2014-2021 Douglas PUD has released >21,000 yearling White Sturgeon into the Wells Project as part of the White Sturgeon Management Plan (WSMP) Phase 1 Supplementation Objective 4.1.2. (Table 1). As of January 2022, Douglas PUD is on target to release another 325 fish into the Wells Project at the end of May 2022. The current supplementation SOA will expire immediately following the release of these fish.

In 2017, the Aquatic Settlement Workgroup (Aquatic SWG) agreed to a reduction of White Sturgeon stocking numbers from 5,000 fish per year to 315-325 fish per year at a size \geq 200 grams/fish (Wells Reservoir White Sturgeon Supplementation SOA 2017). This stocking rate and size was determined to be consistent with the goal of maintaining a population of 1,000-1,100 adult (>165 cm fork length) White Sturgeon in the Wells Reservoir.

Table 1. Number and average weight at release of White Sturgeon released in the Wells Reservoir 2014-2021.

Brood Year	Release Year	2021 Age	# Released	Weight @ Release (g)
2013	2014	8	5044	166.5 (0.8)
2014	2015	7	5009	97.6 (0.5)
2015	2016	6	5289	147.0 (0.8)
2016	2017	5	5131	118.4 (0.7)
2017	2018	4	337	281.0 (2.9)
2018	2019	3	99	364.7 (13)
2019	2020	2	570	495.7 (4.9)
2020	2021	1	338	916.7 (10.8)
2021	2022 (Projected)	<1	325	~400.0

Total abundance of White Sturgeon 45-170 cm in the Wells Reservoir is estimated at approximately 2,000 fish, based on mark-recapture abundance modeling, using the most recent indexing and monitoring data. Brood-year specific survival estimates for fish released 2014-2017 were imprecise, however appeared to be lower than survival rates observed in other White Sturgeon supplementation programs in the mid and upper Columbia River. Data were insufficient to estimate survival for fish released 2018-2021 following the reduction in stocking numbers and an increase in fish size at release. It is suspected that these larger fish will exhibit higher survival, however additional monitoring is needed to confirm this assumption.

Continued releases of 325 White Sturgeon but at a larger size of ≥ 350 grams/fish annually (2023-2026) are anticipated to increase the current abundance level in the Wells Reservoir. Following the collection of additional data on more recent release groups of fish and the ability to produce reliable estimates of survival, the Aquatic SWG will reevaluate stocking numbers.

References:

Aquatic Settlement Workgroup (2017). Wells Reservoir White Sturgeon Supplementation 2018-2022 Statement of Agreement. Approved January 11, 2017.