

**APPENDIX C.**  
**MAJOR PHYSICAL FACILITIES AT MAKAH NFH**

The Makah NFH began operations in 1981 to restore and enhance depleted runs of salmon and steelhead on the Makah Reservation. The hatchery is situated on approximately 80 acres that are leased by the FWS from the Makah Tribe along the west shore of the Tsoo-Yess River. The major physical facilities of the Makah NFH are described below.

**Fish culture facilities:**

- Twenty-nine (29), 11-foot-wide by 80-foot-long raceways.
- Four (4), 4-foot -wide by 40-foot-long raceways.
- 90 egg incubator stacks, 15 trays per stack.
- 22 nursery tanks, 100 ft<sup>3</sup> per tank, for rearing fry.

**Physical plant:**

- Pump house building equipped with traveling screens and water management structures.
- An aeration/sedimentation pond, a pollution control pond, and a 1.2-mile-long serpentine abatement channel.
- Five sand filters, in parallel, with a total capacity of 1,700 gpm for removing silt from influent water from the Tsoo-Yess River.
- Two 450 kW back-up generators. The electrical load of the hatchery can be carried by one generator. The second generator is redundant in the event of a primary generator failure.
- An electric weir on the Tsoo-Yess River for trapping adult salmon and steelhead for broodstock.
- An enclosed adult spawning facility, directly attached to the hatchery building, which contains five adult holding ponds, hydraulic fish crowders, a Pescalator™ (Archimedes screw) for lifting adult fish out of a holding pond, two anesthetic tanks, a fish sorting table, and a series of connecting pipes to relocate fish sorted for broodstock.

**Buildings:**

- Two-story hatchery building. The upper story houses administrative offices and a visitor's center. The lower story (ground level) includes a crew break room, gear locker room, feed storage room, metal shop, general shop, a generator room, sand filters for treating influent water, and a fry nursery area.
- A service building that includes parking stalls for Service vehicles, a hazardous materials room, tool storage facilities, and a woodworking shop.
- Four permanent government residences for required-occupancy staff: three quarters for residences and one that serves as a guest house.
- Other satellite structures include storage buildings, a fire shed, a sewage treatment plant and an egg isolation/quarantine building.