Photo 2-13. Fish Trailer (Offices)

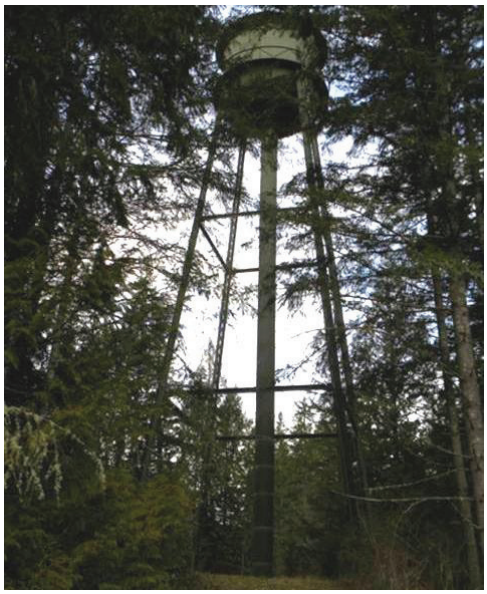

Photo 2-14. Water Tower (Non-Potable)

Photo 2-15. Old Analyzer Building

Photo 2-16. Hatchery Construction December 2010

Photo 2-17. 9 Road/Park Gate at Landsburg Road

Photo 2-18. Landsburg Park Interpretive Area

Photo 2-19. Landsburg Park Shelter

Photo 2-20. Landsburg Park Picnic Area

Photo 2-21. Park Portable Toilet Structure

Photo 2-22. Old Park Restrooms (non-functional)

Photo 2-23. Park Garage

The following are the important changes noted during the site tour:

- A temporary fabric structure has been erected southeast of the fish trailer to house the fish truck (Photo 2-11). When the new Cedar River Sockeye hatchery is completed, the truck will be relocated to that facility and the structure will be removed.
- The treatment building exterior has been rehabilitated, including extensive painting and roof joist repair (Photo 2-7).
- Security improvements to the treatment building were being made at the time of the site visit, including chain link fencing and a gate around the building and the chlorine cylinder storage area.
- At the logged contractor staging area west of the 9 Road, a new wellhead has been constructed and a trailer and temporary fabric structure are in place.

INTERVIEW RESULTS

Tetra Tech conducted interviews with the following SPU groups and individuals at the project site to assist in the confirmation of the Master Plan program requirements:

- Operations (Candace DeVries)
- Fish Program (Paul Fields)
- Water Transmission and Treatment (Alex Chen and Bill Wells)
- SCADA and Communications (Irina Sinitsyn and Trace Hooper)
- Security (Laurie Van Leuven)

The following sections summarize information gathered from these interviews for four of the five programs (Security is covered separately in Chapter 7). Interview findings also are presented for shared facilities, storage facilities, parking, circulation and Landsburg Park.

Operations

Photos 2-24 through 2-26 show facilities in use by the Operations group. The following sections describe information provided in the interview.

Staff

Five operators provide continuous staffing. Typically one operator and one supervisor are on site during the day and one operator is on site for the night and graveyard shifts.

Future Staff

One half-time person may be added for shift work. No additional growth in staff is anticipated.

Function

The Operations group monitors the site, and oversees the screen house and transmission operations, including water tests for quality. The group initiates repair and maintenance activity for the site and buildings, providing in-house maintenance and limited repairs. Operations staff maintain the site and grounds, including the park.

Photo 2-24. Operations Desk at Treatment Building

Photo 2-25. Treatment Building Lab and Kitchen

Photo 2-26. Makeshift Office in Green Garage

Space Requirements

Table 2-1 summarizes space requirements for the Operations group.

TABLE 2-1.
SPACE REQUIREMENTS FOR OPERATIONS GROUP

Use	Space Requirement (square feet)
Operations Supervisor Office (currently in green garage)	120
Monitoring Room (2 monitoring stations + room for 2 others)	160
Office Storage Closet	80
Water Quality Test Lab (counters, sink, small fume hood, refrigerator for sample storage and pickup)	120
Shared Facilities	See “Shared Facilities”
Storage	See “Storage Facilities”

Fish Program

Photo 2-27 shows the offices used by the Fish program. The following sections describe information provided in the interview.

Photo 2-27. Fish Trailer Offices

Staff

The fish program has a staff of two during most of the year, with five on site during the fall fish run season.

Future Staff

At the time of the interview SPU was planning to add a full-time senior environmental analyst. This is no longer being considered.

Function

Fish program staff members monitor the fish ladder, conduct fish studies, and relocate fish to spawning grounds.

Space Requirements

Table 2-2 summarizes space requirements for the Fish program.

TABLE 2-2.
SPACE REQUIREMENTS FOR FISH PROGRAM

Use	Space Requirement (square feet)
Senior Environmental Analyst Office (currently Paul Faulds)	120
Group Office Workstations (4 @ 60 SF; workstation for Sr. Env. Analyst eliminated)	240
Electronics Room	120
Shared Facilities	See “Shared Facilities”
Storage	See “Storage Facilities”

Water Transmission and Treatment

Staff

There are no regular on-site staff for water transmission and treatment. Treatment operations are performed by the Operations staff.

Future Staff

There are no plans to add staff in the future.

Function

Chlorine

SPU treats water diverted from the Cedar River with chlorine gas to keep the transmission pipe to Lake Youngs free of algae. The gas is delivered by truck in steel cylinders to the treatment building, where it is transferred by monorail to a covered storage area. Dispensing requires water under pressure, which is provided by gravity flow from the adjacent water tank (on tower). The tower is structurally substandard and the ground surrounding it contains particles of lead-based paint.

Fluoride

In addition to chlorine, SPU also adds fluoride to the diverted water at this location. Fluoride tanks are located on a platform just off the 9 Road near the entrance to the dam/treatment site. A paved area with drain provides a spill containment chemical delivery station for tanker trucks. The adjacent compressor building supports the facility.

At the outset of this project SPU indicated that the fluoride facility was to be relocated to Lake Youngs. This has since been reconsidered, and the Water Quality and Treatment Business Area of SPU's Drinking Water Division ("Water Quality") now has recommended that the fluoridation facility at Landsburg be retained.

Future Function

Chlorine

SPU has been in the process of determining the appropriate future treatment method for the Landsburg facility. Chlorine gas is a toxic and corrosive substance that must be handled and stored with great care. The existing chlorine gas operation is permitted but "grandfathered" under earlier, less restrictive codes. Tetra Tech was told that any change to the treatment building would trigger significant improvements. SPU has purchased a gas scrubber that would be included as part of this work if necessary. Improvements required for continued use of gas would focus on containment, scrubbing of any discharged chlorine gas, and the development of an acceptable plan for handling and storing the gas and for responding to any gas leaks.

In September 2010, Water Quality recommended converting the existing facility to the sodium hypochlorite (liquid chlorine) treatment process. This is a more benign treatment method that poses less risk than treatment with chlorine gas. New chlorine tanks would be installed at or near the current fluoride tank storage site or near the existing treatment building. No detailed site analysis was made. The future location of these tanks and their containment platform is an important decision requiring coordination between Water Quality and Facilities. The timing for design and construction of this new facility is not established. It may precede the implementation of the facilities recommended by this report or it may proceed concurrently.