# 2014-2015 WHITE RIVER/LAKE TAPPS MAINTENANCE AND IMPROVEMENT PROJECTS FREQUENTLY ASKED QUESTIONS JUNE 2014

### Why will Cascade lower the Lake level?

Cascade will make a series of improvement and maintenance projects that are scheduled between July/August 2014 and March/April 2015. These projects, which will cost about \$11-15 million, include:

- Maintenance of the Barrier Structure in Buckley for Corps of Engineers fish passage operations
- Maintenance projects along the Upper Conveyance System<sup>1</sup>, including sediment removal from the flume and sediment basins and maintenance on fish screens (150,000-200,00 cubic yards)
- Replacement of the last section of Timber Flume (2,300 feet)
- Mechanical improvements to the Headgates
- Maintenance of Dike 3 to control seepage and provide earthquake protection.
- Lower Conveyance System<sup>2</sup> inspection and repairs (if necessary)

## When will the drawdown begin?

In mid-July 2014, Cascade will prepare for the Upper Conveyance System projects by shutting the Headgates; therefore, no water will be diverted into Lake Tapps. Immediately prior to shutting the Headgates, Cascade will raise the Lake Level to the maximum allowable level (approximately elevation 543.0 feet) and close the Lake outlet so no water will be released from the Lake through the Powerhouse. Under these circumstances, Recreational Lake Level (above elevation 541.5 feet) should be maintained through Labor Day 2014.

Immediately after Labor Day (week of Sept. 8), Cascade will open the Powerhouse valves and begin to actively draw down the Lake. Releases will range from approximately 100 cfs to 900 cfs. Cascade will announce the timing and level of releases once the schedule has been determined.

#### How low will the Lake level be?

Lake levels in winter have typically been approximately elevation 530 feet (under Puget Sound Energy ownership) to approximately elevation 535 feet (since Cascade ownership). The inspection of the Lower Conveyance System and repairs to Dike 3 require that the Lake level be substantially lower – elevation 520 feet for Dike 3 and 505 feet - to allow physical access for inspection of the Lower Conveyance tunnels. The Lake last was lowered this far in 2003 for seismic upgrades to many of the dikes.

# For how long?

Cascade's goal is to have the Lake level down to approximately elevation 505 feet by late November/early December 2014, to provide maximum time for projects to be completed prior to Lake refill in Spring 2015. The Lower Conveyance System inspection is anticipated to be complete in late 2014. Any repairs that are required following the inspection will be scheduled to be completed as quickly as possible. Dike 3 repairs are anticipated to be completed in late 2014/early 2015. It is anticipated that the Timber Flume Replacement and Headgate Improvements will be completed in late February/early March 2015. These projects must be completed in order for restart diversion from the White River to refill the Lake.

### When will the Lake be refilled?

Exact timing on Spring 2015 refill will depend on a number of factors: when projects are completed (in particular the Headgate Improvements and Timber Flume Replacement Projects); and the flow in the

<sup>&</sup>lt;sup>1</sup> The Upper Conveyance System refers to the facilities used to divert and convey water from the White River to Lake Tapps, including the Barrier Structure and Headgates, Flume, settling basins and fish screen.

<sup>&</sup>lt;sup>2</sup> The Lower Conveyance System refers to the facilities used to release water from Lake Tapps back to the White River, including the tunnel intake and 12 foot diameter tunnel, forebay, penstocks, Powerhouse and Tailrace canal.

White River available for diversion. The flume replacement project is phased to allow refill of the lake as soon as feasible. The project schedules anticipate that refill could begin in mid-March/early April 2015. With average to above average White River flows, the Lake could reach Recreational Level by late April/mid-May. If White River flows are below average, Recreational Lake Level would not be reached until late May/early June.

The Headgate Improvements and replacement of the Timber Flume will provide additional assurances that Cascade will be able to refill the Lake, by providing more reliable facilities capable of handling the maximum diversion allowed.

### Will there be an impact on the fish in the Lake?

Fish tend to migrate to deeper water as the lake level is lowered. Cascade will monitor the situation during the drawdown, and if necessary, work with the State Fish and Wildlife to restock the Lake

# Will there be an impact on water supply wells?

Cascade is taking a thorough look to see if there will be impacts and will work with communities with well systems to monitor any potential impacts.

#### What should I do as a lakefront resident?

- Be prepared to take boats and other recreational items out of the Lake immediately after Labor Day
  to avoid being grounded as the Lake level drops. Cascade will begin actively lowering the Lake level
  the week of Sept. 8 and Lake levels will drop quickly. Residents are also strongly encouraged to
  watch Lake levels near their property during August, as some areas may become too shallow for
  recreational use earlier than Labor Day. Cascade will announce the exact date for active Lake
  drawdown when it is determined.
- If lakefront residents are planning construction activities below elevation 545 feet, fall/winter 2014/2015 will provide an extended window of low Lake levels for completing projects. This would be an opportunity to raise docks or bulkheads that are close to being inundated at Lake elevation 543.0 feet or are subject to over wash from boat wakes. Any work below elevation 545 feet requires a Cascade license (see the Cascade web site for an application and additional information) and will likely require other permits or approvals from the City of Bonney Lake or Pierce County.

# Are there activities that I cannot do on the Lake during drawdown?

- There are no recreational activities allowed on the dry Lake bed. Hiking, biking, use of motorized vehicles or any other access to the dry Lake bed is prohibited.
- No debris may be placed on the Lake bed. Cascade is not planning to remove debris or stumps during the extended draw down. Lakefront residents are cautioned that these activities may require permits or other approvals and unauthorized dumping may be subject to fines.

For Lake level (including drawdown and refill schedules), project status, license and other Lake Tapps information, please go to <a href="https://www.cascadewater.org">www.cascadewater.org</a>